



Lough Melvin Programme Contract Number LM001

Evaluation of the controls and governance arrangements pertaining to the management of Lough Melvin

Final Report
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Woodrow Wildlife Consulting

In association with:



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1. Introduction

1.1 Background to Project

The Lough Melvin catchment drains an area of approximately 26,000 ha, 42% of which lies within Northern Ireland. The lake has a surface area of over 2,000 ha being the 10th largest lake in Ireland and is situated within the counties of Leitrim (ROI) and Fermanagh (NI). The main catchment land uses are extensive agriculture, housing and plantation forestry.

Lough Melvin is a mesotrophic (low-medium nutrient status) lake which has been designated as a candidate Special Area of Conservation (SAC) under the EU Habitats Directive. It supports a unique fish population; three sub-species of brown trout; Atlantic salmon and; a small population of Arctic char. Significant vegetation communities also occur within the catchment area including *Molinia* meadows and sessile oak woodlands.

The health of Lough Melvin and its ecological communities is particularly vulnerable to catchment pressures and landscape uses. The most significant threat is nutrient enrichment and reduced biodiversity through trophic change.

The aim of the Lough Melvin Nutrient Reduction Programme is to develop a Catchment Management Plan (CMP) for Lough Melvin that will promote good ecological status and address the primary catchment threats and consequent loss of biological integrity. The CMP will provide a means of targeted catchment management to conserve ecological status as required by the E.U. Water Framework Directive and meet the nature conservation obligations of the Habitats Directive.

1.2 Purpose of project

The understanding of controls and governance arrangements that are relevant to management of Lough Melvin is a key part of the catchment management process. The purpose of this project is to identify, assess and analyse relevant legislation, policies and governance issues in both the Republic of Ireland and Northern Ireland. The project also identifies gaps, barriers and constraints to the effective implementation of controls and governance, and makes recommendations for solutions or mitigation. The principal output from the project is a chapter of the Lough Melvin Catchment Management Plan.

This report summarises the two key phases of the project, and provides an assessment of the relevant measures in both jurisdictions. It is the purpose of this project only to identify those controls which are of material relevance to the management of the Lough Melvin catchment. The report does not, therefore, represent a definitive list of legislation for each of the issues identified. As it represents a summary of relevant legislation and controls, it should not be taken as legal advice. Persons seeking to explore the exact nature of legal requirements should consult the provisions themselves and/or seek independent legal advice.

2. Process and Methodology

2.1 Task 1 – identification of legislation and controls

The first phase of the project involved collation of information on the key management issues relating to the catchment. This process provided the basis for subsequent assessment and analysis of relevant controls and governance issues. The key sources of information were:

- Studies and reports already generated by the Lough Melvin Programme;
- Water Matters report for the NW International River Basin District by NS Share;
- Other sources of information including reports, corporate documents and government department websites (see Bibliography);
- Information obtained from contacts within relevant organisations.

Once the key management issues relating to the catchment had been identified, the following data relating to each issue were collated:

- i) Details of the relevant governing bodies in each jurisdiction;
- ii) Relevant international, EU and national legislation, including jurisdictional variation in either legislation or implementation;
- iii) National, regional or local policy statements, relevant to the Melvin catchment;

An extensive list of legislation and controls was compiled although every effort was made to include only those which were of some relevance to the catchment. Some controls emerged at an early stage as being of particular significance to Lough Melvin, and comments were included to summarise their relevance. These comments identify the issues which are of greatest potential impact and reflect on any obvious disparity in the situation between the two jurisdictions. This annotated list provided an agenda for further investigation through phase two of the project. The full list of legislation, policies and other controls is included as Appendix I of this report.

2.2 Task 2 – evaluation of stakeholders’ roles and governance issues

This phase of the project involved extensive research to build on the identification of existing legislation and controls carried out under the first phase of the project. The principal source of information was face to face interviews with key stakeholders.

Prior to interviews being conducted, an interview template was drafted and agreed with the Programme Manager. The interviews were designed to obtain maximum information on the role of each organisation, the policies and legislation governing that role and delivery mechanisms including co-ordination with other bodies. A copy of the template is included as Appendix II of this report.

A total of 32 interviews were conducted. 25 of these were face to face interviews, and an additional 7 interviews were conducted by phone. Interviewees included 13 members of the Lough Melvin Project Catchment Management Group or Steering Committee. Across the key issues relevant to the catchment the breakdown of interviewees was as follows:

<u>Issue</u>	<u>Number of Interviewees</u>
Water Quality/Management	9
Agriculture	7
Fisheries	5
Forestry	4
Nature Conservation	3
Planning	2
Waste Management	2 (plus 2 also interviewed under Water Quality)

Where appropriate, an attempt was made to contact local representatives of each key organisation and those possessing a policy overview, often based at the organisation’s headquarters. This approach was designed to ensure that a rounded picture reflecting both local issues and the practicalities of governance was obtained. A list of all interviewees is presented in Appendix III.

The findings both from these interviews and the consultants’ own research and experience of governance issues are detailed in Section 4 of this report. Recommendations (highlighted in bold in the text) are also made, and at the end of each section all key issues and relevant recommendations are presented in a summary Table.

2.3 Final stages

2.3.1 Stakeholder Workshop

Following completion of a draft report for Task 2, a workshop was held at the Town Hall, Enniskillen. Everyone who had been interviewed during Task 2 was invited or offered the opportunity to nominate a suitable representative from their organisation.

The purpose of this workshop was:

- To confirm and agree the most important governance issues in the catchment;
- To discuss recommendations for enhancing effective governance, and
- To provide a forum for comments on the information presented in the draft report.

The workshop was attended by 19 people representing a wide range of organisations with a governance role in the catchment. However, a few key organisations were not represented, such as DOEHLG, EPA, Teagasc and DOE Planning Service. The workshop played an important role in the prioritisation of governance issues within the catchment, as presented in Section 5 of this report.

2.3.2 Steering Committee meeting

The final stage of the project was a presentation to Meeting No.9 of the Lough Melvin Nutrient Reduction Programme Steering Committee. The meeting met the following objectives:

- To summarise the findings of the draft Task 2 report;
- To present the outcomes of the Stakeholder workshop, and
- To receive guidance on the compilation of the final report and Catchment Management Plan section.

2.3.3 Interpretation of results

The stakeholder workshop was not attended by all key organisations, and so an appropriate weighting has been afforded to the conclusions of this event. Nevertheless, the workshop proved valuable in affirming the importance of certain issues and recommendations, and as a forum for discussion amongst the bodies represented.

In addition, there was some variation in the importance attached to certain governance issues by the workshop participants and the consultants. It is important to emphasise therefore, that the conclusions presented in this report draw upon both the consultants' and stakeholders' judgement.

3. Key governance drivers in the Melvin catchment

The most important drivers of management within the catchment are EU Directives relating to water quality and biodiversity and in particular:

- Habitats Directive
- Water Framework Directive
- Nitrates Directive

3.1 Habitats Directive

Lough Melvin has been classified as a Special Area of Conservation (SAC) in NI and is a candidate SAC (cSAC) in RoI under the EU Habitats Directive. The SAC forms the heart of the catchment both in geographical/physical terms and in the context of governance and regulation. The Habitats Directive requires the key features of the SAC to be maintained at a favourable conservation status. Some of these features relate directly to water quality, and the Directive requires favourable condition to be measured against clear scientific parameters. For Lough Melvin this means the setting of clear objectives for the maintenance of the lough's mesotrophic status. The site's scientific and regulatory needs under the Habitats Directive are therefore likely to be more stringent than the more general water quality standards required by the Water Framework Directive.

In this context, the targets and objectives set by the SAC Conservation Plans in each jurisdiction should provide the template for management of the catchment. Key governance issues within the catchment include:

- The status and role of SAC Conservation Plans in both jurisdictions;
- The application of Article 6 of the Habitats Directive and use of "appropriate assessment" of both plans and projects.

3.2 Water Framework Directive

The Water Framework Directive is already having a considerable influence on governance within the catchment. It has provided a statutory basis for standardisation of water quality standards and monitoring across jurisdictions and a catchment-based approach to water management. It requires the waters of Lough Melvin to be at least of good ecological status by 2015. Basic measures relevant to the Lough Melvin catchment will form part of the wider NW River Basin Management Plan, to be published by 2009. There is also scope for the identification of supplementary measures which may be specific to particular sub-catchment areas, such as Lough Melvin. It is anticipated that such supplementary measures will include some of the

measures identified in the Lough Melvin Catchment Management Plan. Such measures should be consistent with and contribute to the water quality (and other) objectives set under the Habitats Directive.

3.3 Nitrates Directive

Agriculture is an important land-use within the catchment, and the Nitrates Directive is a key driver in regulating diffuse pollution from agricultural sources. The Directive does not require any for specific targets for the catchment, but its measures assist both governments to meet their obligations under both the Habitats and Water Framework Directives.

3.4 Additional governance context

Four key governance issues provide a backdrop which is relevant both to the Melvin catchment and in a wider context. These are:

- i) The variation in responsibilities and functions between the Regulatory Authorities in each jurisdiction, and the role of elected councillors in policy and decision-making in RoI;
- ii) The regulatory role of an independent Environmental Protection Agency (EPA) in the Republic of Ireland and the retention of regulation by central government in Northern Ireland;
- iii) The existence of an ongoing Review of Public Administration (RPA) in Northern Ireland and a parallel Review of Environmental Governance;
- iv) The absence of any statutory cross-border body within the catchment, such as Waterways Ireland or the Loughs Agency.

All of these issues have some relevance to how the Melvin catchment is managed.

The project identified that governance issues can be classified under four main headings:

- i) Need for amendment of legislation or policy at a national (NI or RoI) level;
- ii) Implementation of legislation or policy (at both national and catchment level);
- iii) Enforcement capacity of regulating bodies;
- iv) Operational issues, such as cross border or inter-departmental co-operation.

Governance issues across seven arbitrary management categories are described in more detail in Section 4. There is extensive overlap between these categories which are intended for guidance only. In Section 5 issues are prioritised to indicate their significance and urgency, while the recommendations provided are prioritised in terms of their feasibility. It is hoped that this will provide a clear agenda for action by the organisations involved.

4. Stakeholders' roles and governance issues

4.1 Water Management

4.1.1 Summary of Catchment Issues

Water quality legislation represents one of the most significant drivers for management within the Melvin catchment. While statutory obligations on nature conservation and fisheries are also key drivers, many fishery and biodiversity objectives also depend on meeting specific water quality targets.

Key issues affecting the total phosphorus (TP) concentrations of Lough Melvin include:

- Agricultural practices such as stocking levels, spreading of livestock manures and the use of chemical fertilisers and other organic manures other than livestock manure;
- Forestry activity including establishment of new plantations and clear-felling;
- Point source discharges from Waste Water Treatment Works and septic tanks from single dwellings.

An analysis of relevant governance issues follows in Section 4.1.3. The most significant governance issues on water quality in the catchment can be summarised as follows:

- There is an urgent need for common water quality standards and targets across both jurisdictions;
- Existing legislation and regulatory powers are generally adequate in both jurisdictions;
- There is a shortfall in some aspects of regulatory capacity, particularly in relation to septic tank compliance monitoring;
- Cross-border co-ordination is good at a technical level, but lacking at a more practical level within the catchment;
- Water quality monitoring programmes require greater liaison both within and across jurisdictions to ensure common standards and avoid duplication.

4.1.2 Responsible Authorities in the Melvin Catchment

Northern Ireland

Department of the Environment, Environment and Heritage Service (EHS)

Environment and Heritage Service (EHS), which is an agency within the Department of the Environment, has the key statutory responsibilities relating to the water environment. It is the

lead organisation in implementation of the Water Framework Directive and is the regulatory body for all water quality legislation relevant to the catchment in Northern Ireland.

The Water Management Unit (WMU) is a Unit within the Environment and Heritage Service which has responsibility for the protection of the aquatic environment. Its basic functions are established in the Water (NI) Order 1999. It is responsible for the enforcement of the Phosphorus Regulations 2006 and the Nitrates Action Plan Regulations 2006 as well as Statutory Management Requirements of Cross Compliance for the EC Birds, Habitats, Sewage Sludge, Groundwater and Nitrates Directives. Its key activities in the catchment include:

- Monitoring water quality;
- Controlling effluent discharges;
- Taking action to combat or minimise the effects of pollution; and
- Supporting environmental research.

Northern Ireland Water

This government-owned company (GoCo), which was established by statute in 2007, is responsible for water supply and sewerage services in Northern Ireland. Prior to April 1st 2007, sewerage services were the responsibility of the Department for Regional Development (Water Service). The activities of NI Water are regulated by the Department of the Environment, which removes the previous Crown immunity against prosecution for breaches of water quality legislation. Water policy, in relation to water supply and sewerage services, will continue to be set by the Department of Regional Development (DRD).

There are no public water supplies from the Northern Ireland part of the Melvin catchment, but the functions of NI Water are relevant as there is one waste water treatment works located at Garrison. NI Water also provides the service of de-sludging septic tanks and emptying cess pools when requested by householders.

NI Water is a statutory consultee in the planning process, commenting mainly on the capacity of sewerage infrastructure.

Republic of Ireland

Leitrim County Council

Local authorities have the responsibility to protect and improve water quality in all lakes and rivers. While the EPA sets water quality standards, it is the role of local authorities to ensure that standards are attained through implementation and enforcement of water quality legislation. Local authorities are also responsible for water services such as drinking water supply and sewerage schemes. Government policy and legislation in this area is set by the Department of

Environment, Heritage and Local Government (DOEHLG). Local authorities have a key role in implementing the Water Framework Directive. However, both local authorities and the EPA have a role in water quality monitoring.

Local Authority involvement in water quality issues comes largely from powers and responsibilities prescribed under the Local Government (Water Pollution) Act, 1977 and the Local Government (Water Pollution) Act, 1990.

Its water management role within the catchment includes:

- enforcement of water pollution legislation;
- attach appropriate pollution control conditions in the licensing of effluent discharges from industry, etc., made to waters or to sewers;
- issue notices ("section 12 notices") to farmers, etc., specifying measures to be taken within a prescribed period to prevent water pollution.

Leitrim County Council also has powers to require farmers to implement nutrient management plans under the Phosphorous Regulations 1998 and the Water Pollution Act.

Environmental Protection Agency (EPA)

The Environmental Protection Agency (EPA) is an independent public body established under the Environmental Protection Agency Act 1992. It has responsibilities for a wide range of licensing, enforcement, monitoring and assessment activities associated with environmental protection.

Licensing and Regulation

The Environmental Protection Agency is responsible for regulating activities that have significant polluting potential, including the issue of IPPC licences under the 1992 EPA Act.

Enforcement

The Office of Environmental Enforcement (OEE) within the EPA is dedicated to the implementation and enforcement of environmental legislation in Ireland. The OEE role includes supervising the environmental protection activities of local authorities by auditing their performance, providing advice and guidance, and, in appropriate cases, giving binding directions.

Monitoring

The 1992 Act also provides the EPA with a monitoring function. EPA has a duty to monitor the environment, and under the Water Framework Directive has prepared a monitoring programme for all waters.

4.1.3 Governance Issues

4.1.3.1 Recent Measures relevant to Lough Melvin

In Northern Ireland a significant recent development has been the transfer of water services from central government (Department of Regional Development) to a government owned company, NI Water, on 1st April 2007. The Water and Sewerage Services (NI) Order 2006 therefore brings the statutory sewerage undertaker within the scope of the regulatory regime established by the Water (NI) Order 1999.

In the Republic of Ireland, the Water Services Act 2007 transfers responsibility for licensing and enforcement of discharge from WWTW from the local authority to the EPA.

Both measures could have implications for the enforcement of sewage discharges within the catchment.

The prevention or reduction of phosphorus and nitrate enrichment from agricultural sources has also been enhanced in both jurisdictions by the recent introduction of various regulations under the Nitrates Directive (see Section 4.1.3.2).

4.1.3.2 Key Water Quality Drivers in the Catchment

Water Framework Directive

It is widely accepted among stakeholders that implementation of this Directive will have a positive impact on the Lough Melvin catchment. In particular this will result from:

- catchment-based approach to water management;
- more integrated and co-ordinated management;
- enhanced and co-ordinated monitoring arrangements between different bodies and across the jurisdictions;
- preparation and implementation of a Programme of Measures for the wider River Basin District, and sub-catchment management plan for Melvin;
- enhanced participation by non-statutory stakeholders and catchment users.

Many of these benefits are already being realized within the catchment, through, for example, the NS Share Project and the Lough Melvin Programme.

These developments have also introduced a level of cross-border co-ordination hitherto not experienced within the catchment, particularly at a technical level such as the harmonization of monitoring methodologies. However, the following points still need to be addressed:

- i) **There should be agreement (between EHS, Leitrim County Council and the EPA) over water quality definitions for both chemical and ecological parameters.**
- ii) **Correlation tables for soil types across the catchment should be produced to facilitate a common understanding of soil monitoring definitions.**
- iii) **A target for the total phosphorous concentration in Lough Melvin should be agreed between all agencies involved in implementing the Catchment Management Plan. This should be written into WFD implementation plans for each relevant authority, and into Conservation Plan(s) for Lough Melvin SAC (see Nature Conservation section).**
- iii) **A more precise and/or extensive monitoring regime for the catchment may be required, which can pinpoint where in the catchment problems are arising. Water management agencies should consult with fisheries agencies more on the location of sampling points etc.**
- iv) **Agencies in both jurisdictions should reach agreement on a monitoring specification which meets both WFD and Habitats Directive requirements without duplication.**
- v) **Monitoring protocols should be the subject of service level agreements between agencies in the same jurisdiction. This will clarify who is responsible for various aspects of monitoring in the catchment. In the absence of any statutory cross-border body in the catchment (eg Lough's Agency) such issues should be agreed through engagement in a formalized discussion process linked to the WFD River Basin Management Plan, as required by the transposing legislation in both jurisdictions.**

Nitrates Directive

Measures introduced under the Nitrates Directive, such as the NAP Regulations and the Code of Good Agricultural Practice (COGAP), should help maintain the mesotrophic status of Lough Melvin. Several interviewees were optimistic that NAP and Phosphorus Regulations were helpful in raising awareness among the farming community and resulted in some improvements in farming operations, and therefore reduced P levels.

However, there was also concern raised by some stakeholders that these measures are not tailored to catchments such as Melvin. There was concern, for example, that the high likelihood of nutrient loss from the soils in the catchment (due to soil type, slope, etc) and the sensitivity of the water environment to nutrient change, may mean that many farms operating within the 170kg N/ha/year farm limit could still be having an adverse impact on the water environment. There was also concern that, while traditional livestock farming in the catchment relied on the use of dry

bedding, measures applied under the Nitrates Directive (including grant aid for slatted sheds and slurry storage) could be moving farmers into a more slurry-based system involving slatted housing and storage of liquid slurry, or actually increasing their potential for housing livestock over winter. There is concern that this could also lead to inappropriate management of slurry and specifically that slurry is sometimes dealt with in the most expedient way resulting in spreading on inappropriate land or in inappropriate conditions. It is noticeable however (in County Leitrim at least) that applications for slatted sheds have dried up completely since grants ceased being available for them in summer 2007.

In NI, under the NAP Regulations, farmers have until 31 December 2008 to ensure that they have the required livestock manure storage in place. The closed spreading period for organic manures will apply from when a farmer has the required storage in place or by 31 December 2008, whichever is sooner.

Any impacts on traditional farming systems in the catchment should continue to be monitored.

Freshwater Fish Directive

The Freshwater Fish Directive (FFD) should also be an important influence on management of Lough Melvin. Limits are set in the Directive and the transposing Regulations for a number of water quality parameters and monitoring requirements.

Ireland transposed the Directive into national law in 1988, while transposing Regulations were only introduced into NI law in 1997. As a result of a Reasoned Opinion issued by the EU Commission against the UK in 2002, Lough Melvin was designated as a salmonid water in Northern Ireland in December 2003, along with a number of other loughs. From 2003-2006 Lough Melvin and its tributaries were compliant with the Directive's standards. Lough Melvin has not, however, been designated as a salmonid lake in the Republic of Ireland.

Despite the variable implementation of the Directive, it is unclear if this has disadvantaged Lough Melvin to any significant extent. In effect the FFD was not implemented in respect of the catchment until 2003, when the NI section was designated as salmonid. By this time, the WFD had been transposed in to national law in both jurisdictions. The Directive will be repealed and replaced by the Water Framework Directive in 2013. Designation as a salmonid water qualifies Lough Melvin as a Protected Area, which must be registered under the WFD and subjected to a stricter monitoring regime. However the Lough is also on the register as Special Area of Conservation (SAC) in both jurisdictions. Since Atlantic salmon is also a selection feature in both areas, an appropriate monitoring regime is required for this feature in any case.

4.1.3.3 Enforcement and Compliance Issues

Stopping potential pollution

There was concern in the Republic of Ireland that legislation was inadequate for avoiding potential pollution and that it is only effective when it is established that pollution has occurred. Legislation in both jurisdictions does include provisions for addressing potential pollution and a pollution prevention team operates in Northern Ireland to deal with Water order Issues.

Local Government (Water Pollution) Act 1977 (as amended 1990).

Section 9 of the 1990 amendment introduces the power for local authorities to serve notices where an activity etc “could result in the entry of polluting matter to waters.” The period allowed for compliance varies and is specified on an individual notice.

Water (NI) Order 1999

Article 8 provides EHS with the power to serve a notice where pollution “is likely to occur..”. The Article specifies that the notice takes effect after 28 days (if no appeal is brought). The required compliance timescale will form part of the notice. Immediate enforcement notices can be issued under Article 12 for non-compliance with a discharge licence or if likely non-compliance is suspected.

NAP Regulations 2006 (NI)

Regulation 22 of the NAP Regulations provides EHS with the power to serve a notice where there is a breach or there is likely to be a breach of the Regulations.

The concern in ROI relates to the potential delays inherent in the process, especially if an appeal is made against the notice served, and the activity continues during this period. **In these circumstances a stop order or other mechanism which immediately prevents the activity could be helpful. The need for such measures should be clarified.**

Disparity in penalties

There is a marked difference in the level of penalties for breaches of water pollution legislation between jurisdictions. In Ireland, the Water Services Act 2007 amends the penalties specified for offences under the Local Government (Water Pollution) Acts. Most offences carry a maximum fine of €5,000 and/or 3 months imprisonment on summary conviction. This compares to the situation in NI where the Water Order provides for a maximum fine of £20,000 if convicted in a Magistrate’s Court (unlimited if convicted in a Crown Court), or a maximum of 3 months imprisonment if convicted in a Magistrate’s Court (2 years if convicted in a Crown Court) for pollution for many equivalent offences. **Where possible, legislation should be amended to ensure that penalties are broadly similar in both jurisdictions, and that the higher standards are adopted.**

Enforcement capacity

A number of stakeholders perceived that there was a shortfall in water quality enforcement capacity within the catchment, particularly relating to septic tanks and agricultural effluents. There are programmes for compliance monitoring of consents issued under the Water Order and Water Pollution Acts. For example in NI all consented discharges with a maximum permitted daily discharge volume of 5 cubic metres or greater, are included in this programme. Current roles of EHS officers with respect to investigation of pollution include collating evidence and preparing prosecution files for incidents under the Water Order, initiating and supervising clean-up work following certain incidents, carrying out pollution prevention advisory visits to industry, sampling effluents from consented industrial sites, and making recommendations on applications for discharge consents.

However, regulatory bodies in both jurisdictions frequently do not have the resources to undertake enforcement of planning conditions for septic tanks for new dwellings or to remedy failing existing tanks. The effect of nutrient enrichment from septic tanks is currently unknown, but is a concern to all water management agencies. A forthcoming EHS/SNIFFER project on the impacts of the dispersed rural community on water quality in NI aims to improve knowledge of these effects.

In NI, NI Water offers a discretionary service to householders to de-sludge septic tanks, but have no regulatory powers. Tank emptying is undertaken by contractors, and so there is no clear mechanism for reporting problems or issues to EHS.

Some stakeholders considered that the physical remoteness of the regulatory agencies from the area adds to the difficulty in regulating water quality. This may be less of an issue in relation to regulation undertaken by Leitrim County Council. In NI, an Environmental Health (Rivers) Officer and Water Quality Inspectors based in Enniskillen do undertake inspection and regulation duties on behalf of EHS. EHS has recently employed a catchment officer (covering the Erne / Melvin area) to identify and implement actions with river basin management planning in order to resolve water quality issues.

An appropriate enforcement capacity should be sought, informed by the outcomes of existing studies and ongoing water quality monitoring in both NI and ROI, and taking account of the sensitive nature of the catchment. In the meantime, Lough Melvin should be prioritized as a target catchment for proactive monitoring and enforcement, given the significant water quality issues in the catchment.

4.1.3.4 Septic Tanks

The proliferation of single dwellings within the catchment has led to a large increase in the number of septic tanks. There are concerns that the predominant soil types in the catchment are inherently unsuitable as a soakaway receptor, and reference to soil maps of the catchment indicates that a large proportion of the catchment could potentially be a high risk area.

Legislation exists in both jurisdictions to require consent for the use of septic tanks or other similar systems. However, in RoI septic tank consents (derived from soil percolation tests) are an integral part of the planning system for new dwellings under the Planning and Development Act 2000, while in NI there is a separate consent system under the Water (NI) Order 1999.

In RoI the EPA produced a detailed guidance document in 2000 which is in the process of being replaced by a Code of Practice: Wastewater Treatment Systems for Single Houses (Consultation Draft 2007). When introduced, this will replace the existing legal standards for septic tanks set out in Standard Recommendation 6 (SR6), which have been criticized as inadequate for many soil types in Ireland. It is hoped that the new Code of Practice reflects the concerns over soil types such as those in the Melvin catchment, and that alternative solutions (eg use of constructed wetlands) are included. In Northern Ireland BS6297:2007 now contains detailed guidance on septic tank specifications, including percolation area constrictions. Water Order consents require soakaways to be constructed in accordance with this specification.

EHS has put in place a project which aims to improve knowledge of the impact of Northern Ireland's rural / dispersed populations on water quality. It is intended that it will advise future legislation and policy (and provide scientific evidence to support current and future policy) with respect to addressing diffuse pollution. The study includes treatment systems serving single houses, commercial premises and housing clusters.

Some counties in Ireland with a dispersed rural population have considered the use of byelaws under the Local Government Act 1994 to control the design, operation and maintenance of these systems. In Cavan this has resulted in the Water Pollution (Wastewater Treatment Systems for Single Houses) Bye-Laws 2004. The bye-laws specify the frequency of de-sludging, and the need for initial and ongoing assessments of the systems. **Similar bye-laws are being considered for Leitrim, and should be introduced as soon as possible. Consideration should be given to the introduction of similar legislation in NI, possibly as Regulations under the Water (NI) Order 1991.**

4.1.3.5 Cross-border co-operation

There was considerable evidence of a high level of cross-border co-operation, particularly in implementing the Water Framework Directive. This is to be expected since a Working Group on Water Quality was set up in 2000. This comprises officials North and South with appropriate technical support, who are co-operating on a range of initiatives in relation to Water Quality. A North South Water Framework Directive Co-ordination Group was established to deal in particular with the implementation of the EU Water Framework Directive (WFD).

Liaison is often good at an executive or technical level, but poor at local level. For example, there has been little discussion between organisations about establishing common discharge standards across the catchment. Conversely, if there was a major pollution incident, it is more likely that both WMU and Leitrim Council would work together well in a co-ordinated way.

EHS and Leitrim County Council should establish a formalised technical liaison forum with the objective of agreeing common standards for discharge consents and other water quality issues.

Table 1 - Water Quality – summary of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
Common Water Quality standards and monitoring should be agreed across the catchment	Water Framework Directive	<ul style="list-style-type: none"> • Agreement over water quality definitions for both chemical and ecological parameters. • Correlation tables for soil types across the catchment should be produced to facilitate a common understanding of soil monitoring definitions. • Agreed target for the total phosphorous concentration in Lough Melvin between all relevant agencies. • A more precise and/or extensive monitoring regime for the catchment may be required, including greater liaison between water quality and fisheries agencies. • Agencies in both jurisdictions should reach agreement on a monitoring specification which meets both WFD and Habitats Directive requirements without duplication. • Monitoring protocols should be subject to service level agreements between agencies in the same jurisdiction. These should be based on factors including the results of intercalibration exercises.
Farmers encouraged to introduce new storage and housing, leading to subtle changes in agricultural systems in the catchment.	Nitrates Directive and transposing regulations	<ul style="list-style-type: none"> • Monitor effects of regulations on farming practices in the catchment
Address potential loopholes and inconsistencies in enforcement legislation	Water (NI) Order 1999 NAP Regulations 2006 (NI) Phosphorus Regulations 2006 (NI)	<ul style="list-style-type: none"> • Clarify need for introduction of 'stop orders' for potential pollution in ROI. • Work towards parity of enforcement penalties in both jurisdictions through adoption of the higher standards.

	Local Government (Water Pollution) Acts 1977/1990 Cross Compliance SMRs	
Enforcement capacity in the catchment is constrained by resources.	All water quality legislation	<ul style="list-style-type: none"> • An appropriate enforcement capacity should be sought, informed by the outcomes of existing studies and ongoing water quality monitoring in both NI and ROI, and taking account of the sensitive nature of the catchment. • In the meantime, Lough Melvin should be prioritized as a target catchment for proactive monitoring and enforcement
Suitability of the catchment for use of septic tanks etc for one-off housing	Water (NI) Order 1999 Local Government (Water Pollution) Acts 1977/1990	<ul style="list-style-type: none"> • Introduce up to date Codes of Practice relating to location and design of waste treatment for single dwellings • Reflect in land-use planning policies and use of conditions (see Planning section) • Consider introduction of byelaws (ROI) or Regulations relating to septic tanks within the catchment • Operate site assessments through a list of approved contractors in both jurisdictions
Cross-border co-operation on practical issues such as discharge condition standards should be increased	All water quality legislation	<ul style="list-style-type: none"> • EHS and Leitrim County Council should establish a formalised technical forum with the objective of agreeing common standards for discharge consents and other water quality issues. This should be advised by ongoing studies such as the Dispersed Settlement Project in NI.

4.2 Agriculture

4.2.1 Summary of Catchment Issues

Farming is an important land use within the Lough Melvin catchment. However, the dominant soil types (peat and gley) and the upland topography are not suitable for intensive agriculture. The majority of agriculture is permanent grassland with extensive grazing by beef cows, the raising of store cattle and sheep grazing at higher altitude.

Despite the extensive nature of agriculture within the catchment, it is still a significant source of phosphorus (P) loss from diffuse sources. The main factors resulting in P loss are:

- Limited availability of suitable spreadlands for slurry;
- Stocking levels in relation to the carrying capacity of the land;
- Relatively high incidence of high soil P.

An analysis of relevant governance issues follows in Section 4.2.3. The most significant governance issues regarding agriculture in the catchment can be summarised as follows:

- Potential impacts of the Nitrates Directive – both positive and potentially negative (see Section 4.1)
- The importance of agri-environment schemes as incentives to benefit water quality and biodiversity;
- The need for agri-environment schemes to include effective water quality measures;
- The importance of farmers as stakeholders, and the need for their participation in catchment management.

4.2.2 Responsible Authorities in the Melvin Catchment

Northern Ireland

Department of Agriculture and Rural Development (DARD)

DARD is responsible for the promotion, regulation and administration of agriculture in Northern Ireland. The Department is the main link with DEFRA in the UK and the EU Commission in relation to the formation of Rural Development Programmes and through its Countryside Management Division, has developed and managed agri-environment schemes in Northern Ireland, including the West Fermanagh and Erne Lakeland Environmentally Sensitive Area, which includes the Melvin catchment. DARD also administers regulations relating to EIA of agricultural activities, and jointly developed the Nitrates and Phosphorus Regulations with EHS.

DARD Rivers Agency is responsible for the maintenance of watercourses and other drainage works within the catchment.

Department of the Environment

Environment and Heritage Service

EHS is responsible for the regulation of water quality regulations which relate to agricultural activities. EHS is the competent control authority for the NAP Regulations, Phosphorus Regulations, Groundwater Regulations and Sewage Sludge (Use in Agriculture) Regulations. EHS is a competent control authority for The Common Agricultural Policy Single Payment and Support Schemes (Cross Compliance) Regulations (Northern Ireland) 2005. It has responsibility for monitoring compliance of farm businesses with the five environmental Statutory Management Requirements (SMRs) based on the EC Birds, Habitats, Groundwater, Nitrates and Sewage Sludge Directives. There is a requirement that at least 1% of farm businesses in NI are inspected each year, these are mainly selected by an analysis of environmental risk.

Republic of Ireland

Teagasc

Teagasc – the Agriculture and Food Development Authority – is the national body providing integrated research, advisory and training services to the agriculture and food industry and rural communities.

Teagasc provides advice to farmers on, among other things, Good Farm Practice. This includes:

- Professional REPS planning and implementation support services including revamped REPS 4 environmental training courses.
- Professional fertiliser management planning and support services for farmers to comply with the Nitrates Derogation, planning regulation, Local Authority bye laws and tax incentive scheme requirements.
- Comprehensive environmental advice and support service to farmers undertaking farmyard renovation and improvement projects including investment scheme requirements.
- The range of advisory activities is also designed to raise environmental awareness among farmers generally. The programme embraces water quality protection, emissions reduction and countryside management issues.

Department of Agriculture and Food

In carrying out its mandate the Department undertakes a variety of functions including:

- policy advice and development on all areas of Departmental responsibility;
- representation in international especially EU and national negotiations;
- development and implementation of national and EU schemes in support of agriculture food rural development and rural environment;
- monitoring and controlling aspects of food safety;
- control and audit of public expenditure under its control;
- regulation of the agriculture and food industries through national and EU legislation;
- monitoring and controlling animal and plant health and animal welfare;
- monitoring and direction of state bodies engaged in the following areas; - research training and advice; - market development and promotion; - industry regulation and development; - commercial activities;
- direct provision of support services to agriculture and food.
- ensuring cross compliance through the application of Statutory Management Requirements (SMRs)

Leitrim County Council

Local Authorities have a regulatory role in respect of certain agricultural regulations. This includes carrying out farm inspections to ensure compliance with the European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2006. Leitrim County Council may also be involved in farm surveys and enforcement action under the Water Pollution Acts.

Office of Public Works

Responsible for the maintenance of watercourses and other drainage works within the catchment.

4.2.3 Governance Issues

Some controls relevant to agricultural activity are considered in Section 4.1 above, since many of these measures relate directly to water quality and are regulated by water management agencies.

In both jurisdictions, the Agriculture bodies' main role in the catchment is advisory, although does include inspections related to compliance with agri-environment schemes and the Single Farm Payment.

4.2.3.1 Nitrates Directive

The implications of the Nitrates Directive and the implementing Regulations are considered in Section 4.1 above.

4.2.3.2 Agri-environment Schemes

An analysis of the schemes operating within the catchment and recommendations for enhanced measures is being undertaken as part of Strand 2 of the Lough Melvin Programme. However, the following points emerged in the stakeholder interviews.

- The incentive-based approach of agri-environment schemes makes a critical contribution to management of the catchment. The preferred way forward in RoI, for example, is the provision of free soil testing and advice to avoid unnecessary expense on fertiliser by the farmer. This can be accompanied by a suite of agri-environment measures, and can lead to an enhanced understanding of the carrying capacity of the land and improved implementation of existing regulations.
- While there are significant differences in the measures available under REPS and CMS, the new schemes will bring these much closer. For example, the new CMS to be introduced in 2008 will have a greater emphasis on water quality measures, while REPS 4 is focused on protecting and enhancing biodiversity, with water quality issues dealt with under the Nitrates Action Plan.
- **Unified agri-environment measures are required across the catchment. Research by the appropriate agencies suggests that this is best served by a catchment-specific scheme, available to all farmers in the catchment.**

4.2.3.3 Application of EIA for proposed agricultural intensification

Widespread intensification of agriculture is not considered to be a significant issue in the catchment at present. However even small scale agricultural improvement can affect biodiversity and water quality. The EIA Directive applies to proposals to bring uncultivated or semi-natural habitats into intensive agriculture. However, the transposition of this measure in Northern Ireland is potentially more rigorous than the approach in the Republic of Ireland.

Jurisdiction	Legislation	Measures
NI	EIA (Agriculture) Regulations (NI) 2007	No provision for mandatory EIA. Mandatory EIA screening for any proposal to intensify uncultivated land of 2 hectares or more, whether in sensitive area or not. Proposals for restructuring projects must be screened if they exceed 50ha (in sensitive area) or 100ha (no part in sensitive area). For areas under these thresholds, DARD can issue "screening notices" to require smaller projects to be screened for EIA.
ROI	Planning and Development Regulations 2001	Mandatory EIA for schemes >100ha, including areas of uncultivated or semi-natural land.

		Discretion for EIA of sub-threshold development, where likely to have significant effects on the environment. Formal need for screening only where land is within a designated site.
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In essence, the legislation in ROI appears much less likely to lead to EIA for agricultural intensification outside designated nature conservation sites. In NI, there have already been a number of cases where proposals for intensification have been rejected under the EIA process (involving the original 2001 Regulations), although not yet in the Melvin catchment. The Regulations also allow DARD to screen for EIA even for very small areas of habitat.

There has been concern that the legislation is underused, and that not enough farmers know about it. There is also a question mark about the requirement for DARD to “reasonably believe a project is likely to be carried out” before serving a screening notice.

The disparity in this legislation makes it difficult for the requirement for co-ordination relating to projects which could have significant trans-boundary impacts to be effectively implemented, particularly if a project is on the Leitrim side of the catchment and not subject to an EIA.

In the longer term, the introduction of equivalent EIA regulations in Ireland would help to clarify the situation for EIA in Melvin and other areas supporting important semi-natural habitats. In the meantime, a more expansive application of sub-threshold EIA in ROI could help to protect important habitats in the Melvin catchment.

Within the catchment, DARD can further raise the profile of the legislation by continuing to circulate farmers regularly with information about the Regulations. The Erne/Melvin Catchment Group might also provide an appropriate means of dissemination.

4.2.3.4 Agricultural activities outside consent system

There was concern among some interviewees in both jurisdictions that certain potentially damaging activities were not linked to any consent or regulatory mechanism. These include:

- Small scale field drainage;
- Alteration of watercourses;
- Removal of gravel from rivers (unless in contravention of specific Fisheries Act provisions relating to spawning beds)
- Agricultural development not requiring planning permission (see Section 4.4 – Permitted/Exempted Development)

Field drainage is not permitted without the consent of the relevant authority in each jurisdiction under the terms of agri-environment schemes. Also under Good Agricultural and Environmental Condition as part of Cross-Compliance required by those in receipt of Single Farm Payment. It should therefore be limited within the catchment.

The significance of such activities to the catchment is unclear. **There is a need for an audit of such activities and a more detailed assessment of the potential for appropriate consent or regulatory systems to be established if necessary.**

4.2.3.5 Cross-border co-ordination

Regular meetings between DARD, Department of Agriculture and Teagasc are held to share information and experiences, although not specifically relating to Lough Melvin. There is rather less in the way of formal linkages at the practitioners level. **All three bodies should establish a forum with the objective of agreeing a package of common agri-environment measures which can be targeted at the Melvin catchment. Any agricultural forum for the catchment should also include the regulatory bodies such as Leitrim County Council and EHS.**

4.2.3.6 Enforcement

The monitoring and enforcement role of the agriculture bodies is restricted to Single Farm Payment and agri-environment scheme compliance inspections. All water quality related controls are monitored and regulated by EHS or the County Council. Staff from EHS and County Councils are empowered by legislation to undertake inspections and follow up on reported incidents. However, it is the (often) locally based agriculture advisory staff who are the most frequent visitors to farms within the catchment, and who are most likely to identify issues on a regular basis, but they have no enforcement function. Although serious pollution incidents are reported by agriculture advisors, an issue in both jurisdictions is concern that the farmers' trust could be lost if the advisors are seen as enforcement agents.

This dilemma is understandable, and although protocols do exist for reporting of agricultural pollution, the extent of reporting may be variable. **Clear protocols are required to clarify what level and standard of reporting agricultural advisors are expected to provide. Because of the concerns over the use of agricultural advisors for any level of enforcement, alternative solutions such as community awareness and reporting should be explored.**

Other issues which affect regulation of agricultural source pollution include:

- i) the significant resource needs to establish a programme of regular monitoring of farms across each jurisdiction, and;
- ii) opposition (in ROI) from farmers' representatives to unannounced farm inspections.

Table 2 - Agriculture – summaries of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
Farmers encouraged to introduce new storage and housing, leading to subtle changes in agricultural systems in the catchment.	Nitrates Directive and transposing regulations	<ul style="list-style-type: none"> • Monitor effects of regulations on farming practices in the catchment • Provision of grants for new slatted sheds should be subject to an assessment of the capacity to accommodate the resulting slurry
Agri-environment schemes have a key role in management of the catchment	Rural Development Regulations	<ul style="list-style-type: none"> • A suite of unified agri-environment measures should be available to all farmers in the Melvin catchment; • These should be supported by measures aimed at enhancing farmers' understanding of nutrient issues and carrying capacity of their land. Increased rates for these measures in the catchment should be explored. • Appropriate schemes should be monitored with contingency measures available if water quality is not improving as a result • There should be an increased level of inspection of participating farms in the catchment
Cross-border co-ordination on agri-environment schemes could be enhanced	As above	<ul style="list-style-type: none"> • Agriculture agencies should establish a forum with the objective of agreeing appropriate agri-environment measures which can be targeted at the Melvin catchment. Any agricultural forum should also include the regulatory bodies such as Leitrim County Council and EHS.
There is significant variation in the scope for EIA of agricultural intensification between NI and ROI.	EIA (Agriculture) Regulations (NI) 2007 Planning and Development Regulations 2001	<ul style="list-style-type: none"> • In longer term restore parity through introduction of amended legislation; • In short term increase application of sub-threshold EIA for agricultural improvement of important habitats; • In NI enhance promotion and dissemination of information about the Regulations in Melvin catchment, eg through Erne/Melvin Catchment Group.

Governance Issue	Relevant control(s)	Recommendations
Certain agricultural activities fall outside any consent system		<ul style="list-style-type: none"> • Audit extent of activities outside consent system in Melvin catchment • Legislative change for issues such as movement of stock between catchments may be necessary
Agriculture advisors have no enforcement functions and have a limited role in pollution reporting	All water quality legislation	<ul style="list-style-type: none"> • Clear protocols are required to clarify what level and standard of reporting agricultural advisors are expected to provide. • Alternative options for reporting and enforcement, such as community approaches, should be explored.

4.3 Nature Conservation

4.3.1 Summary of Catchment Issues

Lough Melvin is a site of European importance for its nature conservation interests. In Northern Ireland is a designated Special Area for Conservation (SAC) under the Habitats Directive and Area of Special Scientific Interest (ASSI), while in Ireland it is a candidate SAC and Natural Heritage Area (NHA). The features for which it was classified as SAC are listed below:

Feature type	Feature	Jurisdiction
Habitat	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflora and/or of the Isoet-Nanojuncetea	Both RoI and NI
Habitat	Molinia meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinia caeruleae</i>)	NI only
Habitat	Old sessile oak woods with Ilex and Blechnum in the British Isles	NI only
Species	Salmon <i>Salmo salar</i>	RoI and NI
Species	Otter <i>Lutra lutra</i>	RoI only

Apart from the salmon, the remainder of the freshwater fish assemblage is not included in the Habitats Directive Annexes as a potential feature. The freshwater fish assemblage is however included as a feature for the ASSI designation. Despite its importance for biodiversity and fisheries, Lough Melvin has not been designated as a Ramsar site in either jurisdiction.

An analysis of relevant governance issues follows in Section 4.3.3. The most significant governance issues regarding nature conservation in the catchment can be summarised as follows:

- Effective implementation of the Habitats Directive is critical for the ecological health of the catchment;
- Implementation of the Habitats Directive is variable, especially the use and application of “appropriate assessment” under Article 6.
- A more co-ordinated approach to management of Lough Melvin SAC is desirable.

4.3.2 Responsible Authorities in the Melvin Catchment

Northern Ireland

Department of the Environment

Environment and Heritage Service

The designation, protection and management of key wildlife sites is the responsibility of Environment and Heritage Service, Natural Heritage Directorate.

EHS is a statutory consultee and provides detailed nature conservation input including planning conditions to the planning authority, Planning Service. EHS is the principal competent authority in decisions relating to Natura 2000 sites and in undertaking Appropriate Assessment of plans or projects likely to affect these sites. EHS Natural Heritage has regional staff based in County Fermanagh.

Republic of Ireland

National Parks and Wildlife Service

Part of the Department of the Environment Heritage and Local Government (DOEHLG), the NPWS is responsible for the conservation of a range of habitats and species in Ireland, including through the appropriate designation and protection of NHAs, SPAs and SACs. They also have responsibility for the management of Statutory Nature Reserves. The DOEHLG core is responsible for introduction of nature conservation policy and legislation.

Local Authorities

Local Authorities have an important role in protection of nature conservation, notably through decisions made within the planning process, but also through their role in ensuring good water quality.

4.3.3 Governance Issues

4.3.3.1 Compliance with the EU Habitats Directive - Appropriate Assessment

Article 6 of the Habitats Directive requires an appropriate assessment of any plan or project likely to have a significant affect on a Natura 2000 site. If this assessment concludes that the plan or project would have an adverse affect on the integrity of the site, then it cannot be consented unless there are no alternative solutions and the plan or project must be carried out for imperative reasons of overriding public interest. In such cases compensatory measures are required to ensure that the overall coherence of the Natura 2000 network is safeguarded.

These requirements are transposed into Irish and NI law by the:

- European Communities (Natural Habitats) Regulations, 1997 – 2005 and
- Conservation (Natural Habitats etc) Regulations (NI) 1995 (as amended in 2004 and 2007)

Within the Melvin catchment there is evidence that Article 6 of the Directive is not being widely or properly applied. Few plans or projects which could have had a significant affect on Lough Melvin have been subjected to an AA.

Article 6 is relevant to many plans or projects within the catchment. These include:

- Leitrim County Development Plan and Fermanagh Area Plan
- Forestry management plans
- Major individual planning applications within the catchment, including tourism proposals etc

The requirement for AA of land-use plans had been neglected in both jurisdictions until recently. DOE in NI introduced Regulations in 2007 which specifically require AA of land use plans. The existing Fermanagh Area Plan 2007 may have to be considered retrospectively. In ROI the issue has come to the surface through the December 2007 ruling by the European Court of Justice against Ireland (C-418/04) for non compliance with the EU Birds and Habitats Directives. This ruling found that Ireland's transposing legislation does not specifically make plans subject to an appropriate assessment.

In addition to situations in which an AA needs to be applied, there is also variation between the two jurisdictions on what constitutes an AA. There is also widespread confusion on the respective roles of AA and Strategic Environmental Assessment of plans and programmes.

The correct application of AA can be encouraged through the use of suitable planning policies in Development Plans. These policies should accurately reflect the requirements of Article 6. In many cases, this is done by using the wording in Article 6 directly in the policy. The policy included in PPS2 – planning and nature conservation in NI has adopted this approach.

There are also concerns that landowners in the catchment are unaware, or claim to be, of the SAC designation, the list of Notifiable Operations and the need for AA in certain cases. This has been cited as a reason for damage to habitat within the SAC in one recent case. There is currently a consultation proposal in NI to introduce a new offence of damaging a designated site

despite being unaware of the designation. Until this becomes law, this remains an important issue in this jurisdiction.

In order to address these issues the following approach is recommended:

- **Training on the application of Article 6 should be provided to all relevant authorities in both jurisdictions, including the planning authorities, forestry agencies, water services authorities, and fisheries authorities.**
- **A programme of education of landowners whose activities could have an impact on the SAC should be undertaken in both jurisdictions.**
- **Service Level Agreements may be required to formalize consultation between organizations on the need for AA.**
- **Agreement should be reached between EHS and NPWS on what information and coverage is required in order to undertake an AA.**
- **The EC (Natural Habitats) Regulations require further amendment to ensure compliance with the Habitats Directive relating to AA of plans.**

4.3.3.2 Lough Melvin SAC

The management of trans-boundary Natura 2000 sites requires a great deal of co-operation to ensure that there is a standardized approach to monitoring and management.

Conservation Plans for Lough Melvin SAC have been drafted in each jurisdiction. However the content and status of these plans varies considerably. The EHS plan was updated in 2007, and includes conservation objectives and favourable condition tables for the selection features. This includes a target TP level of $<25\mu\text{g}^{-1}$ for the Lough. The NPWS plan was prepared in 2002, but not yet published. It includes broad objectives for each feature, but does not contain favourable condition tables. **One objective is to produce a single Conservation Plan for the site, and this should still be an aspiration for both bodies. A single Conservation Plan would help to galvanize cross-border co-ordination and would help to tie other agencies in to the process, and provide a mechanism for all bodies to work towards maintaining the Lough at favourable conservation status. At least a common approach to the preparation of the existing plans should be agreed. The Conservation Plan(s) should include detailed favourable condition tables to cover all selection features.**

4.3.3.3 Cross-border co-ordination

Currently quarterly semi-formal meetings are held between NPWS and EHS. At these meetings individual planning proposals are often discussed, such as the proposed hotel development at Lough Melvin. **This level and type of communication is to be welcomed, but the scope of discussion could be broadened out to include high level discussion on the potential for a unified Conservation Plan for the site.**

4.3.3.4 Enforcement

There have been a few (mostly minor) recent enforcement cases affecting Lough Melvin SAC, where enforcement letters have been issued. Damaging operations within an SAC are controlled by similar regulations in both jurisdictions. In both cases, it is an offence for landowners or occupiers to undertake certain activities without written consent (from the Minister of the Environment (Ireland) or Department of the Environment (NI) is obtained). Similar provisions exist for the protection of ASSIs and NHAs under the Environment (NI) Order 2002 and Wildlife (Amendment) Act 2000, respectively. The Environment (NI) Order did introduce certain increased powers for the Department to protect ASSIs, including

- A new offence of intentional or reckless damage or disturbance to the special features of an ASSI;
- Powers to make byelaws for the protection of an ASSI (eg from third party damage).

These powers have not yet been used within the Melvin area, but could increase the scope for enforcement in the NI part of the catchment. **Consideration should be given by the DOEHLG in Ireland to the need for enhancing NHA provisions in the Wildlife Acts.**

Table 3 Nature Conservation – summary of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
Implementation of the Habitats Directive within the catchment is extremely variable	Habitats Directive and transposing regulations	<ul style="list-style-type: none"> • Training on the application of Article 6 should be provided to all relevant authorities in both jurisdictions, including the planning authorities, forestry agencies, water services authorities, and fisheries authorities. • Cross border agreement should be reached on what is required to fulfil an Appropriate Assessment under Article 6 • A programme of education of landowners whose activities could have an impact on the SAC should be undertaken in both jurisdictions. • Service Level Agreements may be required to formalize consultation between organizations on the need for appropriate assessment screening. • The EC (Natural Habitats) Regulations require further amendment to ensure compliance with the Habitats Directive.
Two separate Conservation plans have been drafted for Lough Melvin SAC. Their status and level of detail differ significantly.	Habitats Directive and transposing regulations	<ul style="list-style-type: none"> • A single Conservation Plan should be prepared for Lough Melvin SAC, or at least a common approach taken to separate plans • This should include detailed favourable condition tables for all selection features
The scope of liaison between EHS and NPWS should be increased	Habitats Directive	<ul style="list-style-type: none"> • Ongoing liaison between NPWS and EHS should include discussion on the preparation of a unified Conservation Plan approach
There is some variation in enforcement powers for designated sites between NI and ROI	Environment (NI) Order 2002 Wildlife (Amendment) Act 2000	<ul style="list-style-type: none"> • Consideration should be given by the DOEHLG in Ireland to the need for enhancing NHA provisions in the Wildlife Acts.

4.4 Land-use planning

4.4.1 Summary of Catchment Issues

Land-use planning is a key determinant of environmental quality within the Melvin catchment. Planning policies, zonations and individual decisions can all have direct or indirect impacts on water quality, habitat loss and other ecological factors. In particular, decisions relating to housing developments and even individual houses have the potential to affect the water quality of Lough Melvin.

An analysis of relevant governance issues follows in Section 4.4.3. The most significant governance issues regarding land-use planning in the catchment can be summarised as follows:

- The transposition and implementation of the EIA Directive is variable across jurisdictions;
- Planning policies for the protection of Natura 2000 sites are extremely variable;
- The planning system has a key role in addressing issues such as septic tanks and one-off housing;
- The expansion of settlements such as Garrison and Kinlough;
- The need for planning authorities to be more closely involved in catchment management issues;

4.4.2 Responsible Authorities in the Melvin Catchment

Northern Ireland

Department of the Environment

Planning Service

In Northern Ireland the principal planning authority is Planning Service, which is an agency within the Department of the Environment. Planning Service is responsible for the production of Planning Policy Statements, Area Plans as well as development control issues. Under the current Review of Public Administration (RPA), it has been proposed that significant planning powers will be transferred to the seven new local authorities. However, since the restoration of devolution in May 2007, a final decision on the boundaries of the new council areas has yet to be taken. The Melvin catchment is the responsibility of the Omagh Divisional Office which has a sub-Divisional Office located in Enniskillen.

Planning Appeals Commission

The PAC is the appellate body for NI. It is only able to consider appeals brought by applicants against decisions, conditions imposed etc. In exercising its function, the PAC can interpret

planning policy and this has resulted in a more flexible interpretation of Countryside Policy Areas adjacent to Lough Erne and Melvin in County Fermanagh.

Department of Regional Development (DRD)

DRD is responsible for certain strategic planning issues, including the preparation of the Regional Development Strategy for NI 2025.

Republic of Ireland

Leitrim County Council

The main planning regulatory body, Local Authorities influence planning from strategic and reactive perspectives and by the extent to which they consult with other agencies. The Melvin catchment area is covered by the Leitrim County Development Plan, and a new plan is currently being drafted.

Border Regional Authority

The Border Regional Authority is one of eight Authorities established by the Government under the Local Government Act 1991 (Regional Authority Establishment Orders 1993). The Authority has a number of roles, including of ensuring co-ordination, consistency and compatibility in plans, policies, etc. at a regional level.

An Bord Pleanála

The Bord is the State's appellate body. It differs from the PAC in being able to hear appeals by third parties.

4.4.3 Governance Issues

4.4.3.1 Transposition and Implementation of the EIA Directive

There are significant differences in the transposition and implementation of the EIA Directive (97/11/EC) between jurisdictions. The key issues are:

- The inclusion of high thresholds for mandatory EIA in the EIA Regulations.
- An indication that there is scope for greater application of EIA for sub-threshold developments, particularly in Republic of Ireland.

The high thresholds for agricultural intensification were discussed in Section 4.2 and there are also high thresholds relating to forestry proposals (see Section 4.6). However, for peat extraction, which could be an issue in the Melvin catchment, the situation is more complex.

Jurisdiction	Legislation	Measures
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NI	Planning (EIA) Regulations (NI) 1999	Mandatory EIA for peat extraction >150ha. EIA for peat extraction of any scale likely to have significant effects on the environment
ROI	EC (EIA) (Amendment) Regulations 2001 Planning and Development Regulations 2005	Mandatory EIA for peat extraction >30ha. EIA for peat extraction >10ha (or of any scale within designated sites) likely to have significant effects on the environment. [Peat extraction of <10ha does not come within planning system]

The key implication of this situation is that EIA for peat extraction in ROI is effectively ruled out for areas <10ha outside designated sites. Although the threshold for mandatory EIA in NI is extremely high, there is no minimum size for sub-threshold EIA. There is also a strong indication that sub-threshold EIA is generally more regularly applied in NI. A contributory factor may be that the DOEHLG guidelines on sub-threshold EIA arguably present a narrow interpretation of the use of this discretionary power by planning authorities.

Increased application of sub-threshold EIA should be considered by the planning authorities, particularly in ROI. Training and guidance on the interpretation of “significant effects on the environment” and other key issues, should be considered.

4.4.3.2 Planning and Site Safeguard

The issue of compliance with the Habitats Directive in respect of Natura 2000 sites (ie Lough Melvin) is considered in Section 4.2.3.1.

Another issue regarding Natura 2000 sites is the lack of a standardized approach to site protection policies in the Republic of Ireland. In NI, *PPS2 - planning and nature conservation* provides a standard policy on Natura 2000 sites for use in all Area Plans. There is no national planning guidance for nature conservation policies in ROI, and policies for designated sites (including Natura 2000 sites) vary significantly across County Development Plans (CDPs). Policies for protection of Natura 2000 sites in many CDPs fall well below what is required by the Habitats Directive.

- **Suitable planning policies for Natura 2000 sites should be included in Development Plans. The review of Leitrim CDP 2003-2009 should include a robust policy which accurately reflects the requirements of Article 6. PPS2 in NI is currently under review and should be amended to reflect the requirement for AA of Area Plans.**

- **Guidance on policies for Natura 2000 sites is required to ensure compliance with the Birds and Habitats Directives. This could be achieved by the introduction of National Planning Guidance on this issue.**

In both jurisdictions the planning authorities have difficulty in refusing proposals solely for nature conservation reasons. The reasons for this differ between jurisdictions.

ROI: Schedule 4 of the Planning and Development Act does not list protection of natural heritage outside designated sites as a valid reason for refusal.

NI: The construction of policies in Planning Policy Statement 2 for protection of biodiversity outside designated sites does not enable planning authorities to refuse planning permission.

This situation should be more straightforward to address in NI, where a review of PPS2 is due.

Although no timescale has been confirmed, the review of PPS2 should be carried out as a matter of urgency. It is likely that there would be opposition to any proposal to amend Schedule 4 of the PDA in Ireland to expressly enable planning authorities to refuse on this basis. In the absence of a change to Irish law, the use of stronger, criteria-based policies in County Development Plans is recommended.

4.4.3.3 Planning Policy and Single dwellings

Planning policies on one-of housing also differs between NI and ROI.

Northern Ireland

In NI the introduction of *Planning Policy Statement 14 – sustainable development in the countryside* sparked controversy, and the policy is currently under review. PPS14 removes the presumption in favour of development in the countryside and applies a series of tests for any development proposal. In essence, it applies a blanket Countryside Policy Area (CPA) approach to the whole of NI and replaces the former CPA around the shores of Lough Melvin. There is also a policy requiring an applicant to demonstrate that a development will not create or add to a pollution problem.

There are suggestions that the review of PPS14 might introduce a different approach between the west and east of NI. A stricter approach is required in areas such as the Melvin catchment where continued increase in single dwellings could raise TP levels in Lough Melvin.

It is recommended that the current provisions of PPS14 or its equivalent should continue within the Melvin catchment, at least until further research on the impact of septic tanks on the water quality of the Lough has been completed. To achieve this awareness should

be raised at a high level among key government stakeholders through the Lough Melvin Programme.

Republic of Ireland

There is currently no equivalent policy to PPS14 in ROI. However, the introduction of the new EPA codes of practice on waste treatment for single dwellings could have a significant impact on future policies in County Development Plans. In Leitrim for example, more restrictive policies are being proposed in parts of the Melvin catchment, through the County Development Plan 2009-2015.

It is recommended that such policies are included in Leitrim CDP 2009-2015. Awareness of the need for such an approach should be raised amongst government ministers, local councillors, Council Management Team, and other key stakeholders through the Catchment Management Plan process.

In the short term, tertiary treatment or other appropriate waste systems should be required where necessary by the use of planning conditions in both jurisdictions.

4.4.3.4 Cross-border consultation on planning issues

Co-operation occurs over certain development proposals, such as wind farms, which may have trans-boundary landscape or environmental implications. However, there is little or no co-ordination on policy development or the production of Development Plans. It is important that as far as possible, a standard approach on policy development and zonation is reached for the Melvin catchment. While the different timetables for Plan development makes this more problematic, it should not preclude co-ordination of approach. The Leitrim CDP 2009-2015 is currently being drafted, and while there is no timetable for the new Fermanagh Area Plan, it is likely to be reviewed in the next two or three years.

Cross-border co-ordination on the production of Development Plans relevant to Lough Melvin should be undertaken as a matter of course.

4.4.3.5 Involvement of planning authorities in Catchment Management Planning

There was a feeling that the planning authorities in both jurisdictions had not been fully engaged in the catchment management planning process to date. However, it is understood that River Basin Management Plan Guidance for Local Authorities will be available by summer 2008. While this Guidance will be aimed at the wider River Basin Management Plans, it seems that they will provide guidance on issues such as supplementary measures for sensitive catchments and the role of Local Authorities. **As land-use planning in the catchment has fundamental**

implications for the condition of the Lough, it is recommended that every effort is made to involve the planning authorities in all relevant aspects of catchment management.

4.4.3.6 Quality of responses by statutory consultees

The quality of responses from statutory consultees in each jurisdiction appears to be variable. Many responses are very general in nature and the planning authority is not able to use these to support its recommendation or translate this effectively into planning conditions. This input could be crucial in providing a basis for recommending refusal or modifying a proposal which could damage the Lough. Some organizations acknowledged time constraints preventing detailed strategic input to County Development Plans and Area Plans.

Statutory consultees should provide a clear and detailed statement of their position on planning issues.

Where planning conditions are recommended, sufficient information should be provided to enable the planning authority to construct planning conditions as necessary. In NI, some statutory consultees (eg EHS Natural Heritage) routinely provide conditions already written to the planning authority. For both approaches it is recommended that the planning authorities organize training for key statutory consultees on how to enhance their contribution to the planning system.

4.4.3.7 The use of pre-application discussions

Some statutory consultees were very positive about the benefits of early discussions with developers on proposals within the catchment. Such discussions can ensure that key issues are identified early and that potentially damaging proposals can be modified or even withdrawn. **Pre-application discussions involving relevant statutory consultees should be undertaken where appropriate.**

4.4.3.8 Enforcement

Enforcement capability is constrained by resources in both jurisdictions. Enforcement officers do not undertake proactive condition compliance checks and rely on information from members of the public.

Table 4 Land-use planning – summary of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
There are differences in the transposition and implementation of the EIA Directive between jurisdictions.	EIA Directive and transposing Regulations	<ul style="list-style-type: none"> • Increased application of sub-threshold EIA should be considered by the planning authorities, particularly in ROI. • Training and guidance on the interpretation of “significant effects on the environment” and other key issues, should be considered.
The quality of policy protection for Lough Melvin SAC differs significantly between jurisdictions	Habitats Directive PPS 2 – planning and nature conservation Leitrim County Development Plan 2003-2009	<ul style="list-style-type: none"> • The review of Leitrim CDP 2003-2009 should include a robust policy which accurately reflects the requirements of Article 6. • PPS2 in NI is currently under review and should be amended to reflect the requirement for AA of Area Plans. • Compliance with the Birds and Habitats Directives could be achieved by the introduction of National Planning Guidance on this issue.
Planning authorities cannot refuse permission for proposals damaging habitat outside the designated site network	PPS2 Planning and Development Act 2000	<ul style="list-style-type: none"> • PPS2 review should include stronger policies relating to protection of biodiversity outside designated sites • Criteria-based policies for habitat protection could be introduced to Leitrim CDP
Robust planning policies are needed to restrict one-off housing in sensitive parts of the catchment.	PPS14 – sustainable development in the countryside Leitrim County Development Plan 2009-2015	<ul style="list-style-type: none"> • PPS14 policies should continue to be applied in the Melvin catchment • Leitrim CDP 2009-2015 should include policies restricting one-off housing in sensitive parts of the catchment • In both jurisdictions, planning conditions should be used to require tertiary treatment etc where necessary

<p>Cross-border co-ordination relates mainly to certain development control issues</p>	<p>Fermanagh Area Plan Leitrim County Development Plan 2009-2015</p>	<ul style="list-style-type: none"> • Cross-border liaison on the production of Development Plans relevant to Lough Melvin should be undertaken through formalized mechanisms involving the planning authorities and their parent Departments.
<p>Land use planning is a key catchment issue</p>		<ul style="list-style-type: none"> • Every effort should be made to involve planning authorities in the catchment management plan process • A Thematic Local Area Plan for the Lough Melvin catchment should be explored in Leitrim. Consider scope for parallel or integrated approach with NI Planning policy to include the Fermanagh part of the catchment)
<p>The quality of responses from statutory consultees in the catchment is variable</p>	<p>Planning and Development Act 2000 Planning (NI) Order 1991</p>	<ul style="list-style-type: none"> • Statutory consultees should provide a clear and detailed statement of their position on planning issues. • planning authorities should organize training for key statutory consultees on how to enhance their contribution to the planning system (eg planning conditions)
<p>Some statutory consultees are involved in pre-application discussions</p>		<ul style="list-style-type: none"> • Pre-application discussions involving relevant statutory consultees should be undertaken where appropriate.

4.5 Fisheries

4.5.1 Summary of Catchment Issues

Lough Melvin supports a unique post-glacial salmonid fish population including Atlantic salmon, Arctic charr and three races of trout, which are considered by some experts to be separate species – ferox, sonaghan and gillarroo. In addition to being of considerable ecological importance, the fish assemblage also represents an extremely important fishery resource for anglers.

An analysis of relevant governance issues follows in Section 4.5.3. The most significant governance issues regarding fisheries in the catchment can be summarised as follows:

- The need to protect the Lough from pollution and reduction in water quality, especially from diffuse pollution;
- The importance of preventing the introduction of alien species such as zebra mussels;
- The need for harmonisation of regulation across the border;
- Future pressure for water abstraction.

4.5.2 Responsible Authorities in the Melvin Catchment

Northern Ireland

Department of Culture Arts and Leisure (DCAL)

DCAL has overall policy responsibility for the supervision and protection of inland fisheries, and for the establishment and development of fisheries. Under existing legislation the Fisheries Conservancy Board is the enforcement and licensing agency responsible for conservation and protection of inland fisheries, other than those in the Foyle and Carlingford areas which are the responsibility of the Foyle, Carlingford and Irish Lights Commission (FCILC). Under the Review of Public Administration it is planned that the FCB will be disbanded and its functions will be undertaken by DCAL. DCAL has a role under the Fisheries Acts in preventing the introduction of alien fish species (eg pike) into the catchment.

Fisheries Conservancy Board (FCB)

The Fisheries Conservancy Board is a non-departmental Public Body established under the Fisheries Act (NI) 1966. The sponsor body is the Department of Culture, Arts and Leisure, who make appointments to the Board, monitor its performance, and approve the appointment of senior staff. FCB operates as a water bailiff on behalf of DCAL.

Garrison and Melvin Angling Association

Club bailiffs have power to enforce Fisheries Act regulations.

Environment and Heritage Service

EHS has a role in preventing the spread of Zebra mussels and other alien species into the catchment through the enactment and implementation of appropriate legislation and the introduction of codes of practice for lake users etc.

Republic of Ireland

Northern Regional Fisheries Board (NRFB)

The NRFB is the statutory body responsible for the conservation, protection, development, management, promotion and marketing of inland fisheries and sea angling resources in Ireland's northern fisheries region, including the protection of mollusc fisheries.

Leitrim County Council

Local Authorities have roles in protecting fisheries, notably indirectly by ensuring water quality and the integrity of rivers and spawning beds and by avoiding contamination of waters by alien species such as zebra mussels.

Rossinver and Kinlough Angling Clubs

4.5.3 Governance Issues

Most key fisheries issues are tied up in the water quality measures discussed in Section 4.1. This Section highlights other aspects of governance and controls that could have an influence on fish stocks.

4.5.3.1 Alien Species

There is widespread concern about the potential impacts on fisheries (and other biodiversity) from the introduction of alien species such as zebra mussels and pike into the Melvin system. The Fisheries Acts in both jurisdictions include powers for the prohibition of certain fish or eggs (eg pike) into any waters. If pike are introduced into the system it is likely to have been as a result of a deliberate act. In this situation, the statutory powers are almost impossible to enforce effectively, and it is unreasonable to expect fisheries authorities to be able to police this effectively with current resources.

The introduction of zebra mussels is potentially covered by Section 56 of the Wildlife (Amendment) Act 2000 which prohibits the transfer of any exotic species or its spawn etc from one part of the State to another without a licence, "*for the purpose of establishing it in a wild state*". These words are significant as it suggests that the transfer would have to be deliberate, rather than negligent or reckless.

Legislation governing the introduction of new species in NI (Wildlife (NI) Order 1985) does not require the introduction to be deliberate. However, there is a major loophole in Article 15 of the Order. It prohibits the introduction of new alien species of animal and plant into the wild, or the spread of other species listed in Schedule 9. However, the zebra mussel is not a new species in NI and is not listed in Schedule 9. An amendment to the legislation has been recommended in the Zebra Mussel Management Strategy for NI 2004-2010. The Strategy also recommends close co-operation with EPA and NPWS to ensure legislation is in harmony. A consultation document relating to the review of the Wildlife Order was issued in February 2008. This proposes the inclusion of Zebra Mussel in Schedule 9. However, the use of a Schedule to list potentially damaging alien species is restrictive and does not take into account new or likely introductions. **Legislation should therefore be worded to prohibit the deliberate or negligent introduction of any such alien.**

Even if these recommendations were implemented, the difficulty in enforcing such legislation points to the importance of advisory and educational initiatives coupled with stakeholder involvement. **The angling clubs have a key role to play in this, and Government bodies should fully support the clubs in proactive initiatives to prevent the introduction of these species.**

4.5.3.2 Protection of salmon stocks

As salmon stocks are declining across all North Atlantic countries there are limits on the number of salmon that may be retained. Specific bag limits have been set under legislation for Lough Melvin in both NI and ROI. However, there appears to be a disparity in the regulations on salmon catches set, although the season is the same in both jurisdictions (1st February until 30th September).

NI: Catches regulated by FCB under Fisheries Act (NI) 1966

1 salmon per day between 1st February and 31st May

3 salmon per day between 1st June and 30th September

ROI: Catches set annually for individual waters under The Wild Salmon and Sea Trout

Tagging Scheme Regulations

1 salmon per day between 1st February and 11th May, but with a maximum of 3 in the whole period. After this a maximum of 7 can be caught until 30th September.

Despite this, the Garrison and Lough Melvin Angling Association which operates in NI, asserts that all the angling clubs on the lake implement the ROI catch limits. **Nevertheless it is suggested that DCAL, FCB, NRFB and the angling clubs reach an agreement over the statutory limits to ensure that a standard approach is adopted to protect the lough's salmon fishery.**

4.5.3.3 Fisheries enforcement

Fisheries enforcement is low key, although the need for enforcement is limited, due to the strong role of the angling clubs in a close-knit community. The international border could be a major constraint to effective enforcement, as officers from each part of Ireland are unable to enforce in the other jurisdiction. This places further emphasis on the need for the local fisheries clubs to police the lough.

4.5.3.4 Cross-border co-operation

Co-operation involves both liaison between staff and sharing equipment. There are regular meetings at a local and regional level, including an Interreg project 'The Cross Border Angling Tourism Development Project'. At Corporate level the only cross-border contact is through North South Share, fish monitoring group. Lough Melvin does not benefit from the fully integrated cross-border approach which exists in areas under the control of the Loughs Agency. There is a regular co-ordination of activities amongst the three angling clubs who have formed the Melvin Conservation Group with the aim of advocating better pollution regulation around the lough.

Table 5 Fisheries – summary of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
<p>The existing regulations covering the introduction of zebra mussels are inadequate.</p> <p>The role of other stakeholders (eg Angling clubs) in preventing their introduction to Lough Melvin is significant.</p>	<p>Wildlife (NI) Order 1985</p> <p>Wildlife (Amendment) Act 2000</p>	<ul style="list-style-type: none"> • Legislation in both jurisdictions should be amended and harmonised • Government agencies should support angling clubs and other stakeholders in zebra mussel initiatives • A cross border contingency plan should be put into place, including appropriate contacts and procedures
<p>Salmon bag limits differ between jurisdictions</p>	<p>The Wild Salmon and Sea Trout Tagging Scheme Regulations (No. 2) 2006</p> <p>Fisheries Act (NI) 1966 (byelaws)</p>	<ul style="list-style-type: none"> • Fisheries agencies and angling clubs should work to confirm harmonisation of bag limits across the lough

4.6 Forestry

4.6.1 Summary of Catchment Issues

The management of commercial conifer plantations gives rise to a number of environmental issues of relevance to the Melvin catchment. These include:

- drainage of land in preparation for planting, increasing erosion and sediment runoff to water courses
- use of fertilisers in establishing new plantations, and periodic application during early growth stages
- harvesting beside water courses can lead to sedimentation, while needles of felled conifers can contribute to leaching of P or alter the pH of water course.

An analysis of relevant governance issues follows in Section 4.6.3. The most significant governance issues regarding forestry in the catchment can be summarised as follows:

- The use of appropriate assessment (under Habitats Directive) in relation to major forestry operations such as clear-felling.
- Disparity in EIA regulations
- The potential impact of clear-felling on water quality;
- Harmonization of forestry management practices

4.6.2 Responsible Authorities in the Melvin Catchment

Northern Ireland

Department of Agriculture and Rural Development

Forest Service

Both regulation of forestry and management of State forests in NI is the responsibility of Forest Service, which is an executive agency within DARD. Forest Service's key operational objectives are to:

- encourage the extension of the areas of public and private woodland in Northern Ireland
- promote the supply of wood from within Northern Ireland for industrial use.
- promote access to and use of Northern Ireland forests.
- to protect and conserve forests and the associated areas of special natural and heritage interest.

Forest Service work closely with DCAL Fisheries and have a joint project on the Melvin catchment that is to be used as a template for other work in Forest Service.

Republic of Ireland

Forest Service

The Forest Service is responsible for ensuring the development of forestry within Ireland in a manner and to a scale that maximises its contribution to national socio-economic well-being on a sustainable basis that is compatible with the protection of the environment. It is responsible for felling licences, grant aid for private forestry as well as the development of the Forest Environment Protection Scheme (FEPS).

Coillte

Coillte is a State owned company operating primarily in forestry, and has responsibility for a large part Ireland's forested area. Coillte owns over one million acres of land, most of which is forested.

4.6.3 Governance Issues

While forestry standards relating to the environment are very similar in each jurisdiction, there are some variations in forestry management practices. For example, while aerial fertilisation is still undertaken in Northern Ireland, this practice has been discontinued in the Republic of Ireland. Clear-felling regimes also vary, and given the potential impacts of forestry activities on the catchment, co-ordination of felling practice and planting guidelines is important.

The impact of forestry within the catchment therefore depends largely on how standards are applied and what management activities are undertaken. Forestry management is the subject of separate research under the Lough Melvin Programme. Below, some of the key issues raised during stakeholder interviews are highlighted.

4.6.3.1 Application of EIA for forestry operations

The EIA Directive applies to proposals for new planting as well as deforestation. However, the transposition of this measure in Northern Ireland is potentially more rigorous than the approach in the Republic of Ireland.

Jurisdiction	Legislation	Measures
NI	EIA (Forestry) Regulations (NI) 2006	No provision for mandatory EIA. Thresholds are set for when an EIA may be required for a relevant project. Relevant projects are those which would have a significant effect on the environment. Outside sensitive areas the threshold for afforestation is 5 hectares and 1 hectare for deforestation. Any proposal which falls partly within a designated site shall be screened.
ROI	Local Government (Planning and Development) (Amendment) Regulations 2001 EC (EIA) (Amendment) Regulations 2001	The threshold set for mandatory EIA is 50 hectares for afforestation and 70 for felling. Discretion for EIA of sub-threshold development, where likely to have significant effects on the environment. Formal need for screening only where land is within a designated site.

Although ROI legislation sets thresholds for mandatory EIA, these are still very high, and few EIAs are required for sub-threshold forestry proposals situated outside designated sites. **The application of discretionary EIA for sub-threshold projects should be expanded.**

4.6.3.2 Impact of clear-felling on water quality

Clear-felling of large expanses of trees can result in the introduction of nutrients into the Melvin system. Although felling coup systems are used in both jurisdictions, the size of these is dictated by both economic and environmental factors. In addition, the problem of wind throw is often prevalent where smaller felling coups are used. Changes in felling patterns may require a full review of forestry planting and harvesting policy. At present re-planting of clear-felled areas is a statutory requirement in ROI under the Forestry Act. As wholesale re-planting sensitive areas such as the Melvin catchment should be avoided, this requirement should be removed through an amendment to legislation.

A thorough application of forestry environmental guidelines should ensure that silt traps are used, brash is managed and that felling is avoided in wet weather. However, there is also a statutory requirement to assess the potential impacts of such operations on Lough Melvin SAC.

All major forestry operations in the catchment that might have a significant effect on the designated site will require screening for appropriate assessment under Article 6 of the Habitats Directive.

4.6.3.3 Guidelines on use of brash

There is concern at the potential conflict between the recommended use of brash for limiting soil erosion and the potential for P loss from lying brash. **Current guidelines do not address this issue and there is a need for guidelines to be revised.**

4.6.3.4 Cross-border co-operation

DARD Forest Service meets regularly with Coillte at a variety of levels, including through the cross-border forestry working group to co-ordinate planning activities and forest fire action. However, within the Melvin catchment, there appears to be little formalised co-ordination between forestry agencies except for the linkages provided through the Lough Melvin Programme. As strict adherence to all relevant standards (eg not felling in wet weather) is of critical importance in the Melvin catchment, **stakeholders in both jurisdictions should hold regular liaison meetings to ensure that they and their contractors are following standardized appropriate management standards.**

4.6.3.5 Use of riparian buffer strip planting

It was generally agreed that the use of buffer-strip planting of native species could play an important role as a nutrient receptor from both silvicultural and agricultural sources entering the system. Both agri-environment schemes and forestry grant schemes are well-placed to deliver these. However there is an inconsistency of approach between government agencies to buffer strip planting.

In view of this there is a need for forestry and agricultural agencies in both jurisdictions to agree an appropriate design for these schemes. This should include:

- **an assessment of the most appropriate mechanism(s) for delivery;**
- **an audit of the areas within the catchment where such riparian woodlands are most needed;**
- **an agreed specification in terms of species composition, width of buffer etc;**
- **a plan for effective promotion within the catchment**

Table 6 Forestry – summary of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
There is significant variation in the scope for EIA of forestry operations between NI and ROI.	EIA (Forestry) Regulations (NI) 2006 Local Government (Planning and Development) (Amendment) Regulations 2001 EC (EIA) (Amendment) Regulations 2001	<ul style="list-style-type: none"> The application of discretionary EIA for sub-threshold EIAs should be expanded.
The management of clear felling has important implications for the catchment	Habitats Directive Water Framework Directive	<ul style="list-style-type: none"> All major forestry operations in the catchment likely to have a significant effect on Lough Melvin should be screened for appropriate assessment under Article 6 of the Habitats Directive. There should be active management of all riparian buffer zones to reduce the potential impact of clear-felling, including machinery exclusion zones Future forestry planning needs to take account of the potential impact of clear-felling and this should be reflected in buffer zones, open spaces, species composition and coupe sizes. Co-ordination to achieve a total annual clear-fell limit for the catchment should be explored. Amend statutory requirement for re-planting of clear-felled areas under ROI Forestry Acts
Cross-border co-ordination		<ul style="list-style-type: none"> stakeholders in both jurisdictions should hold regular liaison meetings to ensure that they and their contractors are following standardized appropriate management standards.
Need for a co-ordinated approach in advocacy of buffer strips by Forestry and Agriculture agencies	Agri-environment and Farm Woodland schemes	<ul style="list-style-type: none"> Agriculture and Forestry agencies should discuss and agree a standard approach to riparian buffer strips.

4.7 General Governance Issues in the Catchment

4.7.1 Summary of Catchment Issues

During the research for this project a number of general issues relating to the governance of the catchment were raised.

4.7.1.1 Implementation of the Melvin Catchment Management Plan

Several stakeholders expressed concern at how the Melvin Catchment Management Plan would be implemented as many key bodies are focussed on delivery at the River Basin level. There is a clear need to ensure that all the key actions from the Melvin plan are integrated with the River Basin Management Plan process, so that effective delivery is ensured. **An Implementation Group of key stakeholders should be established to co-ordinate the implementation of key measures identified in the Catchment Management Plan. Representatives should be at a sufficiently high level in their organisations to facilitate implementation measures.**

4.7.1.2 Profile of the Melvin Catchment

There was concern that the profile of Lough Melvin was very low among many government bodies and their staff. Often this resulted from a lack of information about the area and the international significance of Lough Melvin in a nature conservation and fisheries context.

Management of the catchment would also benefit by the profile of Lough Melvin (and the issues affecting it) to be increased at a high level in both Governments. Only then might the value of what is being achieved through the Lough Melvin Programme be recognised and replicated in other catchment areas. This is also essential if some of the amendments to policy and legislation identified in this report are to be addressed. Involvement in the Catchment Management Group by high-level representatives from key organisations would assist in this, but this should not be to the exclusion of representatives who have local knowledge.

A strategy for raising awareness of Lough Melvin and its importance amongst key representatives of relevant government bodies should be prepared.

4.7.1.3 Non-government stakeholder participation in Lough Melvin

Involvement of non-government stakeholders is an essential ingredient in management of the Melvin catchment. It is therefore important that other stakeholders are as involved as possible in the Catchment management process. This particularly important where governance and regulation is insufficient to address key issues such as:

- preventing the introduction of zebra mussels and pike into the system or

- involvement in agri-environment and other schemes.

There is currently no mechanism for the co-ordinated involvement of stakeholders across the whole catchment. The Erne/Melvin Catchment Group established by EHS in NI, has up to now focussed on the larger Erne system, and there is concern that the wider range of issues affecting the Erne system may continue to constrain the Group's involvement in the Melvin.

A single cross-border stakeholder group should be established for the Lough Melvin catchment. This could be of particular importance in ensuring a rigorous and co-ordinated approach to the zebra mussel issue for example.

4.7.1.4 Role of local authorities in ROI

Local Authorities in ROI have a very important role in the governance of the catchment, not least through the development of land use policies for decision making in the County Development Plan and area plans. However, such plans and policies need to be agreed with elected members before they can be adopted. .

Local elected members need to be persuaded of the importance of the positive aspects of sustainable land use in the catchment in order to obtain their support for appropriate policies and actions.

Table 7 General governance issues – summary of key governance issues and recommendations

Governance Issue	Relevant control(s)	Recommendations
Need to ensure that the Melvin Catchment Management Plan will be implemented	Catchment Management Group/Plan	<ul style="list-style-type: none"> • An Implementation Group of key stakeholders should be established to co-ordinate the implementation of key measures identified in the Catchment Management Plan. • Representatives should be at a sufficiently high level in their organisations to facilitate implementation measures. • A lead agency should be established – possibly a Local Authority
Need for overall profile of Melvin and its importance to be raised at a high level	Catchment Management Group/Plan	<ul style="list-style-type: none"> • A strategy for raising awareness of Lough Melvin and its importance amongst key representatives of relevant government bodies should be prepared.
Need to fully involve non-government stakeholders		<ul style="list-style-type: none"> • A single cross-border stakeholder group should be established for the Lough Melvin catchment, and separate from the Erne stakeholder group.

Governance Issue	Relevant control(s)	Recommendations
<p>Local authorities and other agencies consider that they have to balance many issues.</p>	<p>Catchment Management Group / Plan County Development Plan Other Strategic Plans</p>	<ul style="list-style-type: none"> • Clear guidance on the application of legislation that should not be balanced against other issues, such as the EU Habitats Directive, should be provided to decision makers. • Designation of areas of differing levels of sensitivity should be used to guide decisions on individual and policy issues. • The option of a thematic Local Area Plan (based on the need to achieve a high water quality) should be explored in order to provide a sound and clear basis for priorities in the area
<p>There is a need to have elected representatives on board to take the Melvin water quality issue forward since they have a major say in the passing of County Development Plans and Policies.</p>		<ul style="list-style-type: none"> • The positive value to the community of measures to protect the area from damage should be highlighted

5. Priority governance issues for Lough Melvin

Section 4 provides details of all the key governance issues identified during the project. However it is essential that these issues are prioritised, to provide clear guidance on the most significant governance issues within the catchment. Prioritisation is based on three main parameters.

- i) The importance of the issues in the context of the three key governance drivers (see Section 3);
- ii) The urgency of addressing shortcomings in governance approaches, and
- iii) The feasibility of addressing these issues in the short term.

The priority issues presented below are based on the following factors:

- The consultants' own experience and judgement, and
- The outcome of the stakeholder workshop described in Section 2.3.1.

One of the main aims of the workshop was to agree the most important governance issues relevant to the catchment. In order to do this, issues identified through previous interviews with stakeholders were presented and workshop attendees were asked to vote for those that they considered to be the most important. It should be acknowledged that the voting can only be representative of those individuals and agencies who attended the workshop. The results are considered to be indicative rather than a definitive importance attributed to each issue.

While there was a strong correlation between the issues agreed at the workshop and those considered by the consultants to be the most important, there were also some notable differences. The matrix below presents the key issues identified by the consultants and summarises their perceived importance by the workshop attendees.

Scores for importance, urgency and feasibility are those ascribed by the consultants, with 1 being the most and 3 the least important, urgent and feasible. The final column indicates the total number of votes given to the issue by the workshop attendees. Full details on the votes given to each issue at the workshop are given at Appendix IV.

The issues are presented together rather than under the different sectors. Recommendations relating to the issues are not presented here but can be found at the indicated table.

Table 8 Priority governance issues

	Governance Issue	Importance	Urgency	Feasibility	Workshop votes N = 19
1	Common Water Quality standards and monitoring should be agreed across the catchment. See table 1 for recommendations	1	1	2	14
2	Enforcement capacity in the catchment may be constrained by resources or other factors See table 1 for recommendations	1	1	3	6
3	Agri-environment schemes have a key role in management of the catchment. Such schemes need to be enhanced to maximise their effect. See table 2 for recommendations	1	1	2	13
4	Transposition and implementation of the Habitats Directive within the catchment is often weak and generally variable across jurisdictions. See table 3 for recommendations	1	1	2	7
5	Two separate Conservation plans have been drafted for Lough Melvin SAC. Their status and level of detail differ significantly. See table 3 for recommendations	1	1	1	6
6	There are differences in the transposition and implementation of the EIA Directive between jurisdictions. See table 4 for recommendations	1	1	2	0
7	The quality of policy protection for Lough Melvin SAC differs significantly between jurisdictions See table 4 for recommendations	1	1	1	2

	Governance Issue	Importance	Urgency	Feasibility	Workshop votes N = 19
8	Land use planning is a key catchment issue (eg in restricting one-off housing in sensitive parts of the catchment) See table 4 for recommendations	1	1	1	5
9	The existing regulations covering the introduction of zebra mussels and other alien species are inadequate. The role of other stakeholders (eg Angling clubs) in preventing their introduction to Lough Melvin is significant. See table 5 for recommendations	1	1	1	5
10	There is significant variation in the scope for EIA of forestry operations between NI and ROI. See table 6 for recommendations	1	2	2	1
11	The management of clear felling has important implications for the catchment See table 6 for recommendations	1	1	2	8
12	There is a need to ensure that the Melvin Catchment Management Plan will be implemented See table 7 for recommendations	1	1	1	13

6. Conclusion

This report has set out to highlight the key governance issues in the Lough Melvin catchment, and where possible appropriate recommendations are made to improve management in the area. The authors have made every effort to ensure that the information contained in this report is accurate and have checked or cross-referenced evidence provided by interviews where required. Where verification has not been possible in the timescale provided, an appropriate caveat has been included in the text.

Much of the value of the report is in the identification of priority issues and the recommendations that accompany them. Their importance is enhanced by a clear 'audit trail' that has led from identification of key controls and governance, through issues associated with their application to the eventual identification and prioritisation of the issues themselves. It is felt that there is considerable value in the fact that many of the issues and a degree of their prioritisation have been identified by the stakeholders themselves. Some additional issues and solutions have also been identified by the authors. The prioritisation of issues has been carried out because of a need to outline those that, if tackled properly, would be likely to make the most significant contributions to protection and enhancement of water quality in the Melvin catchment.

The issues and recommendations identified fall into three main categories:

1. The need to amend national policy or legislation. The need for these changes goes beyond the Melvin catchment, but the recommendations have been retained as they are nevertheless relevant to management of the area.
2. The need for resources to tackle monitoring, enforcement and other statutory obligations. These too have been retained as they may assist government bodies to make a case for additional resources, both within the Melvin catchment and elsewhere.
3. Issues relating to aspects of co-ordination and communication. These process-based recommendations can perhaps be addressed more readily by stakeholders operating within the catchment.

For recommendations in the third category it is clear that a more formalised and regular system of communication is required, with clear objectives and terms of reference for the contacts. The Lough Melvin Programme and Catchment Management Plan provide a firm basis for enhanced co-ordination of activities both within and across jurisdictions.

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Appendix I - Legislation, Policies and Controls relating to Lough Melvin

Water Quality

Table 1 – International Conventions

Legislation/control	Purpose/objective	Relevant Issues
UNECE Convention on the protection and use of trans-boundary watercourses and international lakes (Helsinki Convention 1992)	<p>The purpose of the Convention, drawn up by the United Nations Economic Commission for Europe (UNECE), is to establish a framework for cooperation to protect the aquatic environment, to prevent and control the pollution of trans-boundary watercourses and to ensure the rational use of water resources in the UNECE member countries. The Convention entered into force on 6 October 1996. It has been signed by UK but not yet ratified. Not signed by Ireland.</p> <p>Approved on behalf of EU by Decision 95/308/EC.</p>	<p>Although not ratified in either UK or Ireland, this Convention could provide another framework for cross-border action and co-ordination. However, obligations arising under the Convention such as prevention of trans-boundary impacts, sustainable water management and trans-boundary co-ordination should all be implemented through EU legislation such as the WFD.</p>
Convention on Wetlands (Ramsar Convention 1971)	See Nature Conservation Table 1	

Table 2 – EU Legislation

Legislation/control	Purpose/objective	Relevant Issues
Directive on the quality of fresh waters needing protection or improvement in order to support fish life (2006/44/EEC) Freshwater Fish Directive	<p>This consolidates and repeals the original <i>Freshwater Fish Directive (78/659/EEC)</i>. The Directive requires member states to designate freshwaters needing protection or improvement in order to support fish life, and have a duty to produce Pollution Reduction Programmes to ensure compliance with these standards. The Directive also lays down sampling and monitoring procedures and definitions of conformity between Member States. The EU <i>Freshwater Fish Directive</i> will be repealed in 2013 when its provisions will be integrated into the EU Water Framework Directive. Until then, specific compliance monitoring continues.</p>	<p>Lough Melvin has not been designated as a Salmonid lake in RoI. In NI, Lough Melvin was designated as a Salmonid lake in December 2003, after a Reasoned Opinion against the UK required more waters of >50 ha to be designated under the Directive. The Roogagh and County Rivers have also been designated as Salmonid rivers.</p> <p><u>Implementation</u> Water quality monitoring, management and regulation required by the Directive is undertaken by Environment and Heritage Service in Northern Ireland and by Leitrim County Council/EPA in Ireland.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Directive establishing a framework for Community action in the field of water policy (2000/60/EC)</p> <p>The Water Framework Directive (WFD)</p>	<p>This legislation, which entered into force on 22nd December 2000, will have a radical impact on the way that water resources are managed across the European Union. It was transposed into Northern Ireland law by the <i>Water Environment (WFD) Regulations (Northern Ireland) 2003</i> and into Irish law by the EC (Water Policy) Regulations 2003 (see Tables 3 and 4).</p> <p>Under the WFD, Member States must ensure that all water bodies (excluding artificial water bodies and heavily modified water bodies) are at least of Good Ecological Status by 2015. Artificial and heavily modified water bodies must attain Good Ecological Potential by this date. This will be achieved through the implementation of River Basin Management Plans.</p> <p>The directive sets out to achieve its aims through the following main objectives:</p> <ul style="list-style-type: none"> • expanding the scope of water protection to all waters, surface waters and groundwater; • achieving “Good status” for all waters by 2015 and maintaining “High Status” where it exists; • water management based on river basins, with a combined approach of emission limit values and quality standards; • getting the price of water right; • getting the citizen more closely involved; and • streamlining legislation. <p>The following Directives will be repealed in 2013:</p> <ul style="list-style-type: none"> • Freshwater Fish Directive (78/659/EEC) as amended by Directive 2006/44/EC; • Groundwater Directive (80/68/EEC); • Dangerous Substances Directive (76/464/EEC), with the exception of Article 6, repealed on the date of entry into force of the WFD Directive. 	<p>The WFD will have a direct impact on how Lough Melvin and other water bodies in the catchment are managed and monitored, and will influence land-use management and regulation to ensure that water quality objectives are achieved. In essence it should lead to much more integrated and co-ordinated land-use management, planning and regulation.</p> <p>Lough Melvin catchment falls within the North Western International River Basin District (NWIRBD). The final Programme of Measures for this River Basin District to be published by 2009 will include measures relating to the Lough Melvin catchment. Many of these measures will be drawn directly from the Lough Melvin Catchment Management Plan currently being prepared under the Lough Melvin Programme.</p> <p>Arrangements for the implementation of the WFD in Northern Ireland and Ireland are coordinated at Ministerial level between the Minister with responsibility for the Environment (North) and the Minister for the Environment, Heritage and Local Government (South). The Ministers are assisted in their task of co-ordination by the North South Working Group on Water Quality which meets on a quarterly basis. In addition, the working group establishes from time to time technical, advisory and other expert groups as it considers necessary to support its work. Irish and UK officials participate in meetings with both the UK and Irish technical groups.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Directive on the Quality of Water intended for Human Consumption (98/83/EC)</p> <p>Drinking Water Directive (DWD)</p>	<p>The Drinking Water Directive aims to protect human health from the adverse effects of any contamination of water intended for human consumption.</p> <p>The Directive sets standards for the most common substances (parameters) that can be found in drinking water. In the DWD a total of 48 microbiological and chemical parameters must be monitored and tested regularly. In principle WHO guidelines for drinking water are used as a basis for the standards in the Drinking Water Directive.</p> <p>Drinking water quality is generally monitored at the tap inside private and public premises. Member States report at three yearly intervals.</p>	<p>The requirements of this Directive are relevant to Lough Melvin which is a source of drinking water for Bundoran and Ballyshannon. Treatment of water at the water treatment plant situated at and the chemical analysis applied to it are governed by this Directive. However the quality of the surface waters providing the source of water (ie Lough Melvin) is regulated by the Water Framework Directive. The two Directives are linked through, for example, the use of water capture points. The Directive is currently under review.</p> <p>Implemented in Ireland by the Drinking Water Regulations 2000.</p>
<p>Directive concerning the protection of waters from the adverse effects of domestic sewage, industrial waste and surface water run-off (91/271/EEC) (as amended by Directive 98/15/EC)</p> <p>Urban Waste Water Treatment Directive</p>	<p>The Directive seeks to protect the freshwater, estuarine and coastal environment from the adverse effects of point source discharges of phosphorus and/or nitrates from domestic sewage, industrial waste water and surface water run-off. It sets minimum standards for the collection, treatment and discharge of urban waste water and introduces controls over the disposal of sewage sludge. It is complementary to the Nitrates Directive which relates to effluents from the agricultural sector.</p> <p>Where receiving waters are vulnerable to eutrophication, the Directive requires higher, or tertiary standards of treatment; this involves nutrient (phosphorous and/or nitrogen) removal from the relevant sewage discharges to Directive standards. Qualifying works are defined as those works serving population equivalents greater than 10,000 within designated sensitive areas.</p>	<p>The specific phosphate reduction measures of the Directive do not apply directly to the catchment as there are no areas with a population equivalent of 10,000. In addition, the catchment has not been designated as a “sensitive area” under the Directive. For these reasons there is no European statutory imperative requiring the removal of phosphates at sewage treatment works within the catchment.</p> <p>Notwithstanding this, in Northern Ireland, NI Water and EHS are currently working towards the removal of P from the Garrison WWTW.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Directive on pollution caused by certain dangerous substances discharged into the aquatic environment of the Community (2006/11/EC) (Dangerous Substances Directive)</p>	<p>This Directive consolidates and amends the original Directive (76/464/EEC). It sets a framework for the elimination or reduction of pollution of inland, coastal and territorial waters by particular dangerous substances. Subsequent daughter Directives set standards for particular substances. The consolidating Directive will be integrated into the Water Framework Directive and will therefore be repealed in December 2013.</p>	<p>This Directive is relevant to the protection of both surface and groundwaters within the catchment from the spreading of waste sheep dip and other pesticides. While the Directive relates to a wide range of substances, sheep dip is the most relevant issue in the catchment.</p> <p>Regulations on aerial fertilising of forestry were introduced in Ireland in 2006 under the auspices of this Directive.</p>
<p>Directive concerning the protection of waters against the pollution of waters caused by nitrates from agricultural sources (91/676/EEC)</p> <p>Nitrates Directive</p>	<p>This Directive is focused on both the control of point source and diffuse discharges of nitrates from agricultural activity. It seeks to reduce or prevent the pollution of water caused by the application and storage of inorganic fertiliser and manure on farmland.</p> <p>The Directive requires Member States to monitor surface waters and groundwater for nitrate pollution against a maximum limit of 50mg NO₃ / l. Where this level of pollution is reached, or trends indicate that it could be reached if Action Programmes under the Directive are not established, land draining into the affected waters (and which contribute to pollution) must be designated as a Nitrate Vulnerable Zone (NVZ).</p> <p>The Directive requires Member States to introduce a Code of Good Agricultural Practice which should be generally applicable.</p>	<p>In Northern Ireland, DOE and DARD have agreed to a “Total Territory” approach to implementation of the Directive. This involves the introduction of an Action Programme which applies to all farmers, including those within the Melvin catchment. The introduction of additional phosphorous controls is part of the process of reducing nutrient inputs from agricultural sources.</p> <p>All farmers must also comply with the Code of Good Agricultural Practice introduced under transposing Regulations.</p>
<p>Directive on the protection of groundwater against pollution caused by certain dangerous substances (80/68/EEC)</p> <p>Groundwater Directive</p>	<p>Member States must take the necessary steps to prevent the introduction into groundwater of List I substances and limit the introduction of List II substances so as to avoid pollution.</p> <p>The Directive will be integrated into the Water Framework Directive and will therefore be repealed in December 2013.</p>	<p>See also Dangerous Substances Directive</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>The Directive on the protection of groundwater against pollution and deterioration (2006/118/EC)</p> <p>Protection of Groundwater Directive</p>	<p>This is a daughter Directive to the Water Framework Directive, which was developed in response to the requirements of the WFD.</p> <p>The Water Framework Directive sets objectives for groundwater quality, including an objective to meet "good chemical status" by 2015, an objective on pollution trends, and an objective to prevent or limit the input of pollutants to groundwater. Clarification of the objectives, however, is left to the daughter directive. This focuses on the WFD objectives but seeks to ensure that it was practical, effective, risk-based and proportionate.</p>	<p>Represents an important landmark in retaining EU control over Member States' management of groundwater, as there had been pressure from Member States to regain individual control of groundwater protection. The Directive requires nitrates levels below 50mg per litre, but environmental groups have expressed concern at certain exemptions. However the Directive is not critical to the Melvin catchment where nitrates and use of other agricultural chemicals is not a significant issue.</p>

Table 3 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>Water (Northern Ireland) Order 1999 (SI No. 662)</p>	<p>This is the principal water quality legislation for NI. Under the Order it is an offence to knowingly, or otherwise, make a polluting discharge or deposit either directly or via a drain into a waterway or the underground strata. It is also an offence to make an effluent discharge from a septic tank or treatment plant into a waterway or a soak-away without the consent of the Department of Environment (DOE).</p> <p>The Order establishes EHS as the principal water quality regulator in NI. EHS is responsible for taking action to prevent or minimise the effects of polluting discharges made to waterways. Where the source of pollution can be traced, EHS decides on the appropriate course of action to take. This may include an enforcement notice or instigation of prosecution proceedings</p> <p>This Order repeals and re-enacts with amendments the Water Act (Northern Ireland) 1972. It is in turn amended by the Water and Sewerage Services (NI) Order 2006 – it updates and expands DOE’s function re environmental regulation</p>	<p>EHS is the principal water quality regulator for NI, including for agricultural water quality controls issued under the Nitrates Directive. As agricultural activities are an important source of Total P in the Lough Melvin catchment, EHS has a key role in influencing and managing the lough’s water quality.</p>
<p>Urban Waste Water Treatment Regulations (Northern Ireland) 2007 (SR No. 187)</p>	<p>These regulations transpose the Urban Waste Water Directive into NI law. They require the statutory undertaker to provide and maintain sewers, and specify the level of treatment to be applied. Secondary treatment is required for all population agglomerates over 2,000 population equivalents (PE). The need for tertiary treatment (including removal of P) is restricted to sensitive areas, especially where there is an agglomeration of 10,000 PE. Smaller agglomerations require “appropriate treatment”, which means treatment that allows compliance with relevant EU Directives.</p> <p>The regulations replace the original UWWT Regulations (NI) 1995.</p>	<p>These regulations reflect the new arrangements for delivery of sewerage services in NI. The statutory undertaker is now NI Water – a government-owned company (GoCo) established in 2007. Prior to this sewerage services were the responsibility of the Department for Regional Development (Water Service).</p> <p>As there are no significant population agglomerations in the Melvin catchment, and it is not a “sensitive area” under the Directive, there is no specific requirement for P removal. However, NI Water and EHS are currently working towards the removal of P from the Garrison WWTW.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Water and Sewerage Services (NI) Order 2006 (SI No. 3336)</p>	<p>This Order transfers responsibility for delivery of water and sewerage services on 1 April 2007 from the DRD to a government owned company ("GoCo"). This has been appointed as water and sewerage undertaker for the whole of Northern Ireland and will be run on a commercial basis subject to utility regulation.</p> <p>The Order places extensive duties on the GoCo as a water and sewerage undertaker and provides detailed statutory powers to enable it to carry out its duties, with suitable safeguards for customers. It establishes a regulatory regime through which the Department of Regional Development (DRD) and the new economic and customer service regulator will act as the principal regulators of undertakers. This regime will include a system of regulatory controls in relation to supply obligations, drinking water quality standards, trade effluent and sewage disposal, charges and customer levels of service. The Order sets out a framework for making charges and provides for appropriate mechanisms to deal with customer complaints.</p>	<p>Prior to 2007, water and sewerage services were the responsibility of DRD, which had "Crown immunity" from prosecution. This situation has now changed with the formation of NI Water – the new statutory undertaker. NI Water is now licensed to provide sewage and water services. The Order provides temporary immunity from prosecution if the inherited infrastructure is at fault. However, NI Water must demonstrate that any breach is not due to poor management.</p> <p>Regulation is shared between DRD and EHS and the new NI Authority for Utility Regulation (NIAUR). DRD exercises a general oversight role, while the Department of the Environment also has the key role as environmental regulator and overseer of private water matters.</p>
<p>Water Environment (Water Framework Directive) Regulations (NI) 2003 (SR No.544)</p>	<p>These Regulations transpose the Water Framework Directive into NI law. They require a new, strategic planning process to be established for the purposes of managing, protecting and improving the quality of water resources. That process applies to the river basin district and the part of each international river basin district falling within Northern Ireland. A general duty is placed on the Department of the Environment and other specified Northern Ireland departments to exercise relevant functions in a manner which secures compliance with the Directive; a further general duty is placed on the Department to ensure that the requirements of the Directive in achieving its environmental objectives are co-ordinated.</p>	<p>General responsibility for ensuring that the Directive is given effect in the river basin district and the part of each international river basin district falling within Northern Ireland lies with the DOE. Imposes monitoring obligations on DOE. Work in progress to introduce lake monitoring arrangements which comply with the Directive, in conjunction with authorities in RoI.</p>
<p>Groundwater Regulations (NI) 1998 (SR No. 401)</p>	<p>These Regulations implement the Groundwater Directive (Council Directive 80/68/EEC) for Northern Ireland. The Regulations require the Department of the Environment to prevent the direct or indirect discharge of list I substances to groundwater and to control pollution resulting from the direct or indirect discharge of list II substances. Authorisation by DOE is required for disposal of the listed substances.</p>	<p>See Groundwater Directive. In Melvin catchment disposal of sheep dips is the principal relevant issue.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2003 (SR No. 259)</p>	<p>These Regulations partially implement Council Directive 91/676/EEC concerning the protection of waters against pollution caused by nitrates from agricultural sources. They revoke and replace The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 1996; The Protection of Water Against Agricultural Nitrate Pollution (Amendment) Regulations (Northern Ireland) 1997; and The Protection of Water Against Agricultural Nitrate Pollution (Amendment) Regulations (Northern Ireland) 1999.</p> <p>The Regulations seek to prevent pollution from nitrates via agricultural sources. Mandatory measures within NVZs are detailed by Action Programmes adopted by both DOE and DARD and monitored by EHS. DARD required to establish a voluntary Code of Good Agricultural Practice (COGAP) for all farmers</p>	<p>Although Melvin catchment was not designated as a Nitrate Vulnerable Zone (NVZ) under the Regulations, the COGAP is generally applicable to all farmers.</p>
<p>The Protection of Water Against Agricultural Nitrate Pollution Regulations (Northern Ireland) 2004 (SR No. 419)</p>	<p>The Regulations give further effect to the Nitrates Directive by establishing Northern Ireland as the area to which an action programme will apply, under the Nitrates Directive, to control nutrient losses to water from agriculture. This is known as the “total territory” approach.</p>	<p>With the introduction of these regulations a nitrate action programme for the whole of NI is required. Thus all farmers within the NI section of the Melvin catchment will be required to implement the measures within the programme.</p>
<p>The Nitrates Action Programme Regulations (Northern Ireland) 2006 (SR No.489)</p>	<p>Reduce effects of nutrients from farm sources on NI water quality. Apply to all farmers across NI. The Regulations establish and introduce an action programme that is applicable to all farmers across Northern Ireland and impose an obligation on farmers to prevent water pollution. They also require farmers to have regard to the COGAP introduced by DARD.</p> <p>Chemical fertiliser applications and livestock manure storage are regulated, and detailed records are required. EHS is established as the regulatory body.</p>	<p>The Action Programme introduced under these Regulations is now relevant to the Melvin catchment. Mostly effective from January 1st 2007, except for an exception relating to slurry storage and spreading aspects – latest date for compliance 31 December 2008.</p>
<p>Phosphorus (Use in Agriculture) (P) Regulations (NI) 2006 (SR No.488)</p>	<p>Along with the Nitrates Action Programme Regulations, effective from January 1st 2007. These Regulations aim to prevent water pollution by limiting the amount of phosphorus applied to land. They regulate the spreading of slurry and restrict the amount of chemical fertiliser which can be applied.</p>	<p>Compliance dates as above. The timing and method of slurry spreading is of particular significance in the Melvin catchment. The out-wintering of cattle is also significant in terms of P loss, but this needs to be considered against the problem of slurry disposal from housed cattle.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Control of Pollution (Silage, Slurry and Agricultural Fuel Oil) Regulations (NI) 2003 (SR NO.319)</p> <p>(SSAFO)</p>	<p>This legislation which came into operation 21st July 2003 brings into force additional anti-pollution controls covering the design, siting, construction and repair of silage, slurry and agricultural fuel oil storage facilities. The Regulations, which are the responsibility of DOE EHS, set minimum standards for the construction and siting of new storage structures.</p> <p>Any farmer who has built a new store, or has substantially reconstructed or substantially enlarged an existing store, since 21 July 2003 (unless work or a contract had been undertaken before this date and work was completed before 1 December 2003), must notify the Agricultural Regulations Team, Water Management Unit, Environment and Heritage Service, at least 28 days before the structure is brought into use.</p>	<p>Possibly more important in terms of slurry storage as silage is apparently used less as a fodder source since the advent of cheaper imported cattle feeds.</p>
<p>The Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990</p>	<p>These regulations implement Council Directive 86/278/EEC on the protection of the environment, and in particular soil, when sewage sludge is used on agricultural land. They prohibit the use of sludge from sewage treatment works being spread on agricultural land unless specified requirements are fulfilled.</p> <p>Enforcement of this legislation is carried out by EHS</p> <p>See also Waste Management section</p>	<p>Not identified as a significant issue in the catchment during consultations.</p>
<p>Surface Waters (Fishlife) (Classification) (Northern Ireland) Regulations 1997 (SR No.488) (as amended 2003 and in 2007 to reflect the 2006 Directive).</p>	<p>Transposes the Freshwater Fish Directive into NI law. See also Fisheries Section</p>	
<p>Environment (NI) Order 2002 (SI No. 3153)</p>	<p>See Nature Conservation section</p>	

Table 4 – Republic of Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>Environmental Protection Agency Act, 1992 Act 7 of 1992</p>	<p>The 1992 Act established the EPA, giving it responsibilities for a wide range of licensing, enforcement, monitoring and assessment activities associated with environmental protection.</p> <p>Environmental protection includes the control of pollution of environmental media which include the atmosphere, land, soil and waters.</p> <p>Amongst the general functions of the Agency are the following:</p> <ul style="list-style-type: none"> • Licensing, regulation and control of activities for the purposes of environmental protection; • Monitoring of the quality of the environment, including the establishment and maintenance of • databases of information relating to the environment; and • Provision of support and advisory services for the purposes of environmental protection to local authorities and other public authorities. 	<p>The activities of the EPA are of general relevance to the management of the catchment.</p>
<p>EC (Water Policy) Regulations 2003</p> <p>SI 722, December 2003</p>	<p>These transposed the Water Framework Directive into Irish Legislation. The legislation assigns specific and new functions mainly to the Minister, the EPA and Local Authorities. It provides for participation by interested parties and their facilitation in this process by the Local authorities.</p> <p>In summary the legislation includes provision for:</p> <ul style="list-style-type: none"> • the protection of the status of all waters (i.e. no deterioration to be allowed) and the achievement of at least “good status” by 22 December 2015 for all waters • the establishment of “river basin districts” (RBDs) as the administrative areas for implementation of the Directive (including international RBDs in relation to cross-border river basins) • the co-ordination of actions by all relevant public authorities for water quality management in an RBD including cross-border RBDs • the characterisation of each RBD • the establishment of environmental objectives for each RBD 	<p>Regulations provide the basis for protection of good status of Lough Melvin. They require the establishment of environmental objectives for each RBD</p> <p>They place responsibilities on LAs and EPA - especially with respect to monitoring. In reality Local Authorities take responsibility for physical and chemical monitoring and the EPA takes responsibility for biological monitoring.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>European Communities (Water Policy) Amendment Regulations, 2005 SI 413 of 2005</p>	<p>These Regulations amend Section 16 of the European Communities (Water Policy) Regulations, 2003 relating to the establishment of the River Basin District Advisory Council (RBDAC) and setting out in more detail its size, composition, duration and date of establishment and the requirement to have regard to its output by the relevant local authorities in each river basin district.</p>	<p>The objective of the Advisory Council is to consider matters relating to the preparation of river basin management plans and other matters relevant to the protection and use of the aquatic environment and water resources in the river basin district and advise and make recommendations on these matters to the relevant public authorities.</p>
<p>Water Services Act 2007</p>	<p>This Act incorporates a comprehensive review, update and consolidation of all existing water services legislation, and facilitates the establishment of a comprehensive supervisory regime to ensure compliance with specified performance standards. In summary, the Act includes provision to:</p> <ul style="list-style-type: none"> • Consolidate water services law into a single modern code, for ease of access and application, • Introduce a licensing system to regulate the operations of group water services schemes, • Amend the Environmental Protection Act 1992 to assign responsibility for supervision of sanitary authority water supplies to the Agency. • Strengthen administrative arrangements for planning the delivery of water services at national and local level, and • Place duties of care on users of water services in relation to water conservation, protection of collection and distribution networks, and prevention of risk to public health and the environment. 	<p>This legislation is particularly significant in that it hands over responsibility for licensing and enforcement of discharge from WWTW to EPA from Local Authorities.</p> <p>Note that Foy and Girvan (Lough Melvin catchment Management Plan Interim Report, 2002-2003) suggest that Kinlough and Garrison (outside influence of this Act) are responsible for around 6% of total P into L Melvin. Kiltyclogher WWTW is responsible for around 1%.</p>
<p>Water Services Act 2007 (Commencement) Order 2007 (S.I. No. 846 of 2007)</p>	<p>The first Commencement Order for the Water Services Act 2007 was signed by the Minister on 20 December 2007, and it brings most of the key operational provisions of the Act (such as provisions relating to connections to services, metering, installation of infrastructure and related duties of care) into force, with effect from 31 December 2007. It provides for the commencement of some 85 of the 116 sections in the Act. The remaining provisions will be rolled out over a number of phases as many of these require further consultation with stakeholders and the preparation of regulations and guidelines before they are commenced.</p>	<p>As above</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>European Communities (Drinking Water) Regulations 2007 (S.I. No. 106 of 2007)</p>	<p>These Regulations replicate the existing Drinking Water Regulations of 2000 and also provide for supervision of sanitary authority supplies by the Environmental Protection Agency. Sanitary authorities will continue to be responsible for supervising group scheme supplies, but all monitoring programmes will in future be subject to approval by the Agency. The Agency will in turn be required to supervise the performance by sanitary authorities of their monitoring functions and supervisory authorities will have powers of direct intervention if necessary to ensure compliance with their instructions.</p>	
<p>European Communities (Drinking Water) (No. 2) Regulations 2007 (S.I. No. 278 of 2007)</p>	<p>These Regulations further strengthen the Drinking Water Regulations by increasing penalties for non-compliance with the requirements of the Regulations.</p>	
<p>Waste Water Discharge (Authorisation) Regulations 2007 (SI No. 684 of 2007)</p>	<p>These regulations will provide for the authorisation by the Environmental Protection Agency of discharges from local authority waste water treatment works and collection systems that are released to all types of receiving waters. In the case of discharges from smaller sewage systems, certificates will apply instead of licences.</p> <p>The Environmental Protection Agency, in considering applications for authorisations, will stipulate conditions to ensure compliance with standards for various substances and conformity with obligations under a number of EU environmental Directives. The EPA will periodically review discharge authorisations granted and failure by local authorities to comply with conditions attaching to an authorisation will be an offence."</p>	<p>These regulations refer to the Water Services Act 2007 (above)</p>
<p>EC (Quality of Surface Water Intended for the Abstraction of Drinking Water) Regulations 1989</p> <p>SI 294 of 1989</p>	<p>These Regulations give effect to Directives 75/440/EEC and 79/869/EEC (on drinking water).</p> <p>The Regulations prescribe quality standards and methods and frequencies of analysis for surface fresh water used or intended for use in the abstraction of drinking water.</p> <p>Sanitary authorities are charged with ensuring that requirements are complied with and that substances in water do not exceed the minimum admissible concentration or constitute a public health hazard.</p> <p>The Sanitary Authority is required to regularly monitor the quality of water intended for human consumption.</p> <p>Where monitoring shows that water does not meet specified standards the</p>	<p>There is an abstraction point for drinking water at the northwest end of Lough Melvin. Monitoring undertaken pursuant to the Regulations recently identified an issue with high levels of cryptosporidium in one part of the catchment.</p>

	<p>sanitary authority is to warn the users of the supply and prepare action programme for improvement of water quality.</p> <p>The Regulations provide for the charging by sanitary authorities for monitoring quality of private water supplies.</p>	
<p>EC (Drinking Water No. 2) Regulations, 2007 SI 278 of 2007</p>	<p>These Regulations revoke the EC Drinking Water Regulations, 2007 (SI 106 of 2007). They prescribe parameters and quality standards to be applied and related supervision and enforcement procedures in relation to supplies of drinking water, including requirements as to sampling frequency, methods of analysis, the provision of information to consumers and related matters.</p>	<p>See also 1989 Regulations</p>
<p>Protection of the Environment Act, 2003 Act 27 of 2003</p>	<p>The Protection of the Environment Act 2003 provides primarily for the implementation of Directive 96/61/EC (Integrated Pollution Prevention and Control). The Act also provides a statutory basis for the implementation in full of Directive 80/68/EEC (Groundwater).</p>	
<p>EC (Quality Of Salmonid Waters) Regulations, 1988</p>	<p>See also Fisheries section.</p> <p>The Regulations give effect to Directive 78/659/EEC.</p> <p>These Regulations prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards.</p> <p>Designated fresh waters are specified in First Schedule as salmonid waters and they are to meet the quality standards specified in the Second Schedule.</p> <p>Local authorities are required to carry out sampling of waters as specified. Where salmonid waters do not comply with specified standards the local authority is to establish the reasons why and adopt programme to reduce pollution and ensure compliance with standards.</p> <p>The Local authority is to establish and maintain register of sampling results which are to be available for public inspection</p>	<p>There are apparently no designated salmonid waters in catchment on Rol side. L Melvin is a designated salmonid Lake in NI</p>
<p>Local Government (Water Pollution) Act, 1977 (Water Quality Standards for Phosphorus) Regulations, 1998 SI 258 of 1998</p>	<p>Regulations give effect to certain requirements arising under Directive 76/46/EC (Dangerous Substances). The Regulations provide for specified improvements in water quality conditions in rivers and lakes based on phosphorus concentrations or related water quality classifications. They also provide for periodic reporting in relation to progress in implementing the requirements of the Regulations.</p>	<p>Control of phosphorous is a key issue in limiting nutrient levels in the catchment.</p>

	<p>The Phosphorus Regulations require that water quality be maintained or improved by reference to the baseline biological quality rating (rivers) or trophic status (lakes) assigned by the Agency in the 1995-97 review period or at the first occasion thereafter.</p> <p>Water quality targets set in the Regulations must be met by 2007 at the latest for waters surveyed by the EPA in the 1995-97 period and within a maximum of ten years for waters first surveyed after 1997.</p>	
<p>Water Quality (Dangerous Substance) Regulations, 2001</p> <p>SI 12 of 2001</p>	<p>These Regulations give further effect to Directive 76/464/EC (Dangerous Substances) and give effect to certain provisions of Directive 2000/60/EC (the Water Framework Directive).</p> <p>The Regulations prescribe water quality standards in relation to certain substances in surface waters e.g. rivers, lakes, tidal waters. The 14 substances covered by the Regulations include pesticides, solvents and metals.</p>	<p>The disposal of sheep dip within the catchment area could be an issue, but is unlikely to be a significant contributor to water pollution.</p>
<p>Local Government (Water Pollution) Act, 1977</p> <p>Act 1 of 1977</p> <p>Local Government (Water Pollution) Act, 1990</p> <p>Act 21 of 1990</p>	<p>These Acts include a general prohibition on entry of polluting matter to waters and Local Authorities are assigned the primary responsibility for the control of pollution to waters.</p> <p>The Acts include provisions concerning the following:</p> <ul style="list-style-type: none"> • Licensing of discharges to waters, sewers and groundwaters; • Water quality standards; • Water quality management plans; • Nutrient management plans; • Civil liability of polluters; and • Bye-laws regulating agricultural activities. 	<p>These Acts provide the basis for local Authority involvement in farm inspections, water monitoring and appropriate action throughout the catchment.</p>
<p>Local Government (Water Pollution) Regulations, 1978, 1992, 1996, 1999</p>	<p>The provisions of the 1978 Regulations relate to the following:</p> <ul style="list-style-type: none"> • Procedural matters in relation to licensing of discharges to waters and to sewers; • Registers of licenses and of water abstractions; and • Water quality management plans and other miscellaneous matters under the Local Government (Water Pollution) Act, 1977. <p>The 1992 Regulations:</p> <ul style="list-style-type: none"> • Make further provision for the control of discharges of harmful substances to groundwaters in implementation of Directive 80/68/EEC (Groundwater). 	<p>These Regulations inform local Authority involvement in farm inspections, water monitoring and appropriate action throughout the catchment.</p>

	<p>The 1996 Regulations:</p> <ul style="list-style-type: none"> Amend provisions of the 1992 Regulations on the control of discharges to aquifers in situations where harmful substances are present in discharges, materials being disposed, etc. in such small quantities as to pose no risk to the quality of groundwaters. <p>The 1999 Regulations:</p> <ul style="list-style-type: none"> Amend Part VI of the 1992 Regulations (Control of discharges to aquifers), the purpose being to extend the application of certain water quality standards under those Regulations to a wider range of functions performed by local authorities etc 	
<p>Waste Water Discharge (Authorisation) Regulations 2007</p> <p>S.I. No. 684 of 2007</p>	<p>These regulations govern the licensing and certification / authorisation process of sewage systems owned, managed and operated by Water Service Authorities</p>	<p>These regulations will give licensing and regulatory control of Local Authority sewage systems to the EPA (previously controlled by local Authorities themselves).</p> <p>Waste water treatment works exist in the catchment at Kinlough, Kiltyclogher and Rossinver.</p>
<p>Urban Waste Water Treatment Regulations, 2001</p> <p>SI 254 of 2001</p>	<p>These Regulations are intended to give effect to the Water Framework Directive 2000/60/EC, but principally to give effect to the Urban Wastewater Directive (91/271/EEC).</p> <p>The Regulations:</p> <ul style="list-style-type: none"> Prescribe requirements in relation to the provision of collecting systems and treatment standards and other requirements for urban waste water treatment plants, generally and in sensitive areas; and Provide for monitoring procedures in relation to treatment plants and make provision for pre-treatment requirements in relation to industrial waste water entering collecting systems and urban waste water treatment plants. 	<p>No sensitive areas under the Regulations exist in the catchment</p>
<p>EC (Protection of Waters Against Pollution from Agricultural Sources) Regulations, 2003</p> <p>SI 213 of 2003</p>	<p>These Regulations identify the national territory of Ireland as the area to which an action programme will be applied to protect water quality against pollution caused by nitrates from agricultural sources.</p> <p>The Regulations give further effect to Directive 91/676/EEC (Nitrates Directive) and Directive 2000/60/EC (Water Framework Directive).</p>	<p>The “total territory” approach has now also been introduced to NI, allowing a more co-ordinated approach to action planning in the Melvin catchment and other cross-border areas.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>EC (Good Agricultural Practice for Protection of Waters) Regulations, 2006</p> <p>SI 378 of 2006</p>	<p>These Regulations revoke the 2005 Regulations. They provide statutory support for good agricultural practice to protect waters against pollution from agricultural sources and include measures such as:</p> <ul style="list-style-type: none"> • Set periods when land application of fertilisers is prohibited; • Limits on the land application of fertilisers; • Storage requirements for livestock manure; and • Monitoring of the effectiveness of the measures in terms of agricultural practice and impact on water quality. <p>The Regulations give further effect to Directive 91/676/EEC (Nitrates Directive) and Directive 2000/60/EC (Water Framework Directive).</p> <p>See also Agriculture section</p>	
<p>Protection of Groundwater Regulations, 1999</p> <p>SI 41 of 1999</p>	<p>The Regulations are made under the EPA Act, 1992 and give further effect to Directive 80/68/EEC (Groundwater Directive).</p> <p>These Regulations are intended to provide additional protection for groundwater against discharges of certain dangerous substances. They:</p> <ul style="list-style-type: none"> • Prohibit the discharge by sanitary authorities of certain dangerous substances to groundwater; and • Provide for controls by the EPA, by way of a licensing system, in relation to discharges of other such substances by sanitary authorities. • Any application for a licence to discharge sewage or trade effluents containing harmful substance must be accompanied by the results of a prior investigation into the alternative methods of disposal of the harmful substance and an examination of the aquifer to determine the quality and volume of water present and any risk to the aquifer as a result of the entry of the substance. • The EPA is required to carry out or cause to be carried out monitoring in relation to the effects on groundwaters of a discharge. 	

Agriculture

Table 1 – EU legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
Council Regulation (EC) No 1782/2003 of 29 September 2003	Establishes common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers.	Implemented in NI by the Common Agricultural Policy Single Payment and Support Schemes (Cross Compliance) Regulations (Northern Ireland) 2005
Commission Regulation (EC) No 796/2004 of 21 April 2004	Lays down detailed rules for the implementation of cross-compliance, modulation and the integrated administration and control system provided for in the Council Regulation (EC) No 1782/2003 establishing the common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers.	Implemented in NI by the Common Agricultural Policy Single Payment and Support Schemes (Cross Compliance) Regulations (Northern Ireland) 2005
Commission Regulation (EC) No 795/2004 of 21 April 2004	Lays down detailed rules for the implementation of the single payment scheme provided for in the Council Regulation (EC) No 1782/2003 establishing the common rules for direct support schemes under the common agricultural policy and establishing certain support schemes for farmers.	Single farm payment and decoupling of subsidies from stocking levels may lead to an overall reduction of livestock numbers, especially in upland areas. While extensive farming systems are expected to become even more extensive, there is potential for intensification of larger farm units.
Council Regulation (EC) No.1698/2005 on Support for Rural Development by the European Agricultural Fund for Rural Development (EAFRD). Rural Development Regulation	Provides direction to and support for agriculture and rural development in Member States which is compatible with CAP reforms. A key axis is improving the environment and countryside by supporting land management.	Implemented by the Rural development programme 2007-2013, and through agri-environment and woodland grant schemes.
EU Strategic Guidelines for Rural Development 2006	These guidelines set out a strategic approach and a range of options which Member States could use in their national Rural Development programmes. The future Rural Development policy 2007-2013 will focus on three areas in line with the "three axes" of measures laid down in the new rural development regulation: improving competitiveness for farming and forestry; environment and countryside; improving quality of life and diversification of the rural economy	Implemented by the Rural development programme 2007-2013.

Table 2 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
DARD Strategic Plan 2006-2011	Provides an expression of the DARD Vision for agricultural development and reform, consistent with CAP reform.	Provides a series of strategic objectives and targets, including water quality (phosphate and nitrate) targets.
Northern Ireland Rural Development Programme 2007-2013	<p>Provides a comprehensive programme for agriculture and rural development in NI between 2007 and 2013 under the EU Strategic Guidelines.</p> <p>Axis 2 is targeted at improving the natural environment, including water quality. Measures will include support through Less Favoured Areas Compensatory Allowances Scheme, Agri-Environment Programme and forestry expansion.</p> <p>See also Forestry section</p>	Under NIRDP, the ESA and Countryside Management Schemes will be combined. The agri-environment programme for 2007-2013 will address biodiversity and water quality objectives in line with priorities established in the Northern Ireland Biodiversity Strategy and the Water Framework Directive. The scheme will operate on a whole farm basis and prescriptions include farm waterway and riparian zone management. However, there are also concerns that funding limitations will constrain the scope of the scheme.
EIA (Agriculture) Regulations (NI) 2007 (SR No. 421)	<p>Came into force on 5th November 2007. The Regulations will implement two aspects of the EU Environmental Impact Assessment (EIA) Directive:</p> <ul style="list-style-type: none"> • They will apply new rules under which certain projects for the restructuring of rural land holdings will have to be made subject to the EIA process. • They will replace existing Regulations that apply EIA procedures to projects for the use of uncultivated land and semi-natural areas for intensive agricultural purposes. <p>DARD administers and implements the Regulations.</p>	<p>Threshold set (2 hectares) for EIA screening. Arguably the original 2001 Regulations were ineffective in preventing loss or damage to semi-natural habitats.</p> <p>Notwithstanding this, there are no equivalent Regulations in ROI, where the Planning and Development Regulations 2001 has an unrealistically high threshold of 100 hectares for mandatory EIA for agricultural intensification.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Common Agricultural Policy Single Payment and Support Schemes (Cross Compliance) Regulations (Northern Ireland) 2005 (SR No. 6)</p>	<p>These Regulations make provision in Northern Ireland for the administration and enforcement of Regulation (EC) No. 1782/2003 and Commission Regulation (EC) No. 796/2004 in relation to cross compliance under the new system of direct support schemes (including the Single Payment Scheme) under the Common Agricultural Policy (CAP) to come into force on 1st January 2005.</p> <p>Conditions of Good Agricultural and Environmental Condition (GAEC) apply to all farmers in receipt of Single Farm Payments. DARD is the competent authority for setting and enforcing GAEC.</p>	<p>GAEC obligations have potential to act for benefit of environment within Melvin catchment. Statutory Management Requirements (SMRs) include compliance with the Nitrates Action Programme Regulations etc.</p>
<p>Less Favoured Areas Compensatory Allowances Regulations (NI) 2003 (as amended) (SR No.162)</p>	<p>These Regulations implement Commission Regulation 445/2002 laying down detailed rules for the application of Council Regulation 1257/1999 on support for rural development from the European Agricultural Guidance and Guarantee Fund (EAGGF). They also implement Measure 2 of the previous Northern Ireland Rural Development Programme..</p> <p>In particular the Regulations define the conditions of eligibility for less favoured area compensatory allowance and the rates at which it is to be paid.</p>	<p>The Melvin catchment has been designated as a Severely Disadvantaged Area, allowing farmers within the area to claim LFA payments. These payments will continue under the new NIRD 2007-2013.</p> <p>There is a substantial body of evidence to support the view that cattle-based or mixed grazing systems in Less Favoured Areas should be maintained to achieve maximum levels of biodiversity. Controlled and low level grazing by cattle helps maintain biodiversity and the ecological stability of upland pastures. Conversely, the continuation of grazing in these areas does have water quality implications.</p>
<p>Environmentally Sensitive Areas Designation Order (Northern Ireland) 2005 (SR No 276)</p>	<p>This Order updates existing ESA provisions and ensures parity of conditions and payments with the Countryside Management Scheme. The Agriculture (Environmental Areas) (Northern Ireland) Order 1987 had given DARD the power to designate areas as ESAs.</p>	<p>Lough Melvin forms part of the West Fermanagh and Erne Lakeland ESA, although this will soon be subsumed within the new Countryside Management Scheme.</p>
<p>Environmentally Sensitive Areas (Enforcement) Regulations (Northern Ireland) 2005 (SR No 277)</p>	<p>The Regulations provide for the withholding and recovery of payments payable under an agreement made after the coming into operation of these Regulations under Article 3(2) of the Agriculture (Environmental Areas) (Northern Ireland) Order 1987</p>	

Legislation/control	Purpose/objective	Relevant Issues
Countryside Management Regulations (Northern Ireland) 2005 (SR No.268)	These Regulations update the Countryside Management Scheme provisions.	Although the Melvin catchment is currently within an ESA, these (or their replacement Regulations) may be relevant to the area when ESA/CMS schemes are merged. The CMS as set out in NIRD 2007-2013 is closely linked to the provision of biodiversity and water quality objectives.
Drainage (NI) Order 1973 (SI No. 69) (as amended)	This is the legislative basis for carrying out watercourse maintenance work and flood defence schemes. It establishes DARD as the statutory body with responsibility for maintenance of designated watercourses and other drainage works.	Rivers Agency is responsible for preparing an annual Watercourse Maintenance programme which specifies maintenance works to be undertaken on designated watercourses within the catchment. Statutory bodies and NGOs are consulted on works which may affect designated nature conservation sites. Land owners are responsible for the upkeep of undesignated watercourses. In NI there are no statutory powers to prevent river works by private landowners.
Drainage (EIA) Regulations (NI) 2006 (SR NO 34)	These revoke the original 2001 Regulations. They provide for the implementation in relation to drainage schemes, drainage works, canal schemes and marina works carried out by certain Northern Ireland Departments of the requirements of Council Directive 85/337/EEC (EIA Directive). They require DARD to carry out an environmental impact assessment for certain drainage works and on the basis of that assessment to decide whether or not to proceed with the works or schemes in question.	Apparently few drainage issues in the catchment.

Table 3 – Republic of Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>Arterial Drainage Acts 1945-1995</p>	<p>Facilitates arterial drainage carried out by Office of Public Works (OPW)</p>	<p>Apparently few drainage issues in catchment – OPW has monitored the river height of the River Drowes since mid 1970s</p> <p>Though note that there is no legislation controlling drainage by individuals.</p>
<p>European Communities (Good Agricultural Practice for the Protection of Waters) Regulations 2006</p> <p>SI No 378 of 2006</p>	<p>These regulations aim to protect waters from the impacts of agricultural operations in line with the WFD and Nitrates Directives by means of:</p> <ul style="list-style-type: none"> • Farmyard management (eg capacity and integrity of manure storage facilities) • Nutrient management (including duty of the occupier) • Prevention of water pollution from fertilisers and certain activities (including distances from water bodies and manner / timing of application for spreading of fertilisers) <p>They make certain requirements of both occupiers (eg in terms of general duty and keeping records) and public authorities (eg monitoring and reporting on status of water bodies)</p> <p>New Nitrates Regulations were introduced in 2007 which increased maximum penalties for infringements.</p>	<p>These Regulations carry similar provisions to the Nitrates and Phosphorous Action programmes in NI.</p> <p>They will contribute to addressing the key water quality issues identified for the catchment.</p>
<p>The Rural Environment Protection Scheme (REPS)</p>	<p>The Rural Environment Protection Scheme (REPS), is a scheme designed to reward farmers for carrying out farming activities in an environmentally friendly manner and to bring about environmental improvement on existing farms.</p> <p>The objectives of the Scheme are to:</p> <ul style="list-style-type: none"> • Establish farming practices and production methods which reflect the increasing concern for conservation, landscape protection and wider environmental problems; • Protect wildlife habitats and endangered species of flora and fauna; 	<p>Appropriately targeted REPS could be of benefit in the catchment.</p> <p>There is a need for analysis of suitable measures with respect to reducing nutrient loading.</p> <p>Potential variation between CMS and REPS will be investigated during phase two of this project.</p>

	<ul style="list-style-type: none"> Produce quality food in an extensive and environmentally friendly manner. 	
Farm Improvement Scheme	<p>The objectives of the Scheme are to improve the working and production conditions on farms, to assist competitiveness, and to contribute to the improvement of agricultural incomes. The Scheme will operate in all areas of the State and is applicable to cattle, deer, goats, horses, pigs, poultry, sheep, and to mushroom compost.</p> <p>Grant-aid is now also available for (a) out-wintering pads, (b) meal bins and silos, (c) mats on slats, cubicle beds and internal concrete areas, (d) mobile sheep handling facilities, (e) calf-feeding systems and (f) slurry separators.</p> <p>In order to be eligible for grant-aid, all applications for grant-aid in respect of animal housing or other structures must include appropriate provision for manure/slurry/soiled water storage in accordance with the 2006 Regulations (Nitrates Directive SI 378).</p>	<p>Possible causes of nutrient enrichment include various issues relating to storage and spreading of slurry and manure. Any schemes aimed at reducing the amount of slurry / reducing the amount of slurry that needs to be spread, is likely to be helpful.</p>
Nitrates Derogation allowance	<p>The derogation is available to grassland farms on an individual basis. Grassland farms that apply for derogation, and meet the conditions, will be permitted to exceed the 170 kg of organic manure per hectare limit, up to a maximum of 250 kg per hectare.</p>	<p>The relevance of this issue to the catchment will be investigated during phase two of this project.</p>
Statutory Management Requirements (SMRs)	<p>Under the Single Payment Scheme farmers are required to respect the various Statutory Management Requirements (SMRs) set down in EU legislation (Directives and Regulations) on the environment, public animal and plant health and animal welfare and to maintain land in Good Agricultural and Environmental Condition (GAEC). This is known as Cross Compliance.</p> <p>SMRs- from 2005 include: SMR1 - Conservation of Wild Birds SMR2 - Protection of Groundwater against Pollution SMR3 - Protection of the Environment and Soil when Sewage Sludge is used in agriculture SMR4 - Protection of Waters against Pollution caused by Nitrates SMR5 - Conservation of Natural Habitats and of Wild Flora and Fauna.</p>	<p>Level of issue / monitoring / enforcement unknown, but potentially a significant enforcement tool. Note relevant SMRs listed in column to the left.</p>

<p>Good Farming Practice guidance</p>	<p>Environmental considerations now play an increasing role in EU agricultural policy. Under the Agenda 2000 agreement, all farmers receiving payments under various direct payment schemes must practice farming in accordance with certain environmental requirements. Accordingly, the Department of Agriculture and Food published a Good Farming Practice (“GFP”) booklet in August 2001 and distributed it to all farmers.</p> <p>Compliance with this code is compulsory for farmers participating in the most schemes including REPS and Disadvantaged Areas Compensatory Allowances Scheme</p> <p>Key aspects of Good Farming Practice include:</p> <ul style="list-style-type: none"> • Nutrient Management • Grassland Management • Protection of Watercourses and Wells • Maintenance of Wildlife Habitats • Careful Use of Pesticides and Chemicals • Maintenance on the Farm of Specified Records 	<p>Some of the good practice activities are particularly relevant to the catchment, including:</p> <ul style="list-style-type: none"> • Nutrient Management • Grassland Management • Protection of Watercourses and Wells • Maintenance of Wildlife Habitats
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Nature Conservation

Table 1 – International Conventions

Legislation/control	Purpose/objective	Relevant Issues
<p>The Convention on Wetlands</p> <p>(Ramsar Convention 1971)</p>	<p>The Convention on Wetlands, signed in Ramsar, Iran, in 1971, is an intergovernmental treaty which provides the framework for national action and international cooperation for the conservation and wise use of wetlands and their resources.</p> <p>It requires contracting parties (inter alia) to designate and protect wetland sites of international importance and to introduce national wetland policies (for land-use etc) which will protect and encourage the sustainable use of all wetlands in their territory.</p>	<p>Lough Melvin has not been classified as a Ramsar site in either jurisdiction, although it is likely to qualify due to its unique fish assemblage. Criteria 7 and 8 relate specifically to fish populations.</p> <p>Ireland has yet to complete its progress report from the last Conference of Parties (COP 9) held in 2005.</p> <p>Progress towards introduction of appropriate wetland protection policies has been variable.</p>

Table 2 – EU Legislation

Legislation/control	Purpose/objective	Relevant Issues
<p>Council Directive on the conservation of wild birds (79/409/EEC)</p> <p>The Birds Directive</p>	<p>The Birds Directive requires Member States to classify Special Protection Areas (SPAs) within their territory for the protection of rare and vulnerable species or for regularly occurring migratory species. It also contains a range of general measures for the protection of birds and requires the maintenance of the favourable conservation status of all wild bird species across their distributional range.</p>	<p>Lough Melvin does not qualify for classification as an SPA. However a large upland SPA is proposed for Sligo and Leitrim, and a small part of this will fall within the Melvin catchment.</p>
<p>Council Directive on the conservation of natural habitats and of wild fauna and flora (92/43/EEC)</p> <p>The Habitats Directive</p>	<p>The main aim of the EC Habitats Directive is to promote the maintenance of biodiversity by requiring Member States to take measures to maintain or restore natural habitats and wild species at a favourable conservation status, introducing robust protection for those habitats and species of European importance. The provisions of the Directive require Member States to introduce a range of measures including the protection of species listed in the Annexes.</p> <p>The Habitats Directive introduces for the first time for protected areas, the precautionary principle; that is that projects can only be permitted having</p>	<p>Lough Melvin has been classified as an SAC in both jurisdictions. There are two other SACs part of which lie within the catchment boundary.</p> <p>Plans or projects which are likely to have a significant effect on the site should therefore be subject to an appropriate assessment of their effects on the site's qualifying features. In practice many plans and projects have apparently proceeded without an appropriate assessment or any screening exercise</p>

	<p>ascertained no adverse effect on the integrity of the site. Projects may still be permitted if there are no alternatives, and there are imperative reasons of overriding public interest. In such cases compensation measures will be necessary to ensure the overall integrity of network of sites.</p> <p>Member States shall also endeavour to encourage the management of features of the landscape to support the Natura 2000 network.</p>	<p>being undertaken.</p>
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Table 3 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>Nature Conservation and Amenity Lands (NI) Order 1985 (as amended in 1989) (SI No. 170)</p>	<p>Required the identification and designation of ASSIs pre 2002. Also designation and management of statutory Nature Reserves.</p>	
<p>Environment (NI) Order 2002 (SI No. 3153)</p>	<p>Replaces aspects of the Nature Conservation and Amenity Lands Order in relation to the designation and management of ASSIs. Management powers are enhanced under the 2002 Order. The legislation makes it an offence to carry out operations likely to damage an ASSI without prior permission from the Environment and Heritage Service. It is also an offence to damage or destroy a special feature of an ASSI.</p> <p>The Order also amends parts of the Water (NI) Order 1999 to make additional provision for the control of industrial pollution.</p> <p>The Order brought NI legislation broadly into line with the rest of the UK.</p>	<p>The equivalent legislation in Ireland (Wildlife Act 2000) lacks the same management measures, such as the ability to issue Management Notices, where neglect or inappropriate management threatens the scientific interest of a site.</p> <p>Management agreements may also be issued by the Department to individual landowners.</p>

Legislation/control	Purpose/objective	Relevant Issues
<p>Wildlife (NI) Order 1985 (SI No. 171)</p>	<p>This Order provides for the protection of species including birds, plants and animals. It is an offence under the Order to kill, injure, destroy or disturb listed protected species.</p>	<p>Article 15 prohibits the introduction of new alien species of animal and plant into the wild, or the spread of other species listed in Schedule 9. Zebra mussel is not listed in Schedule 9 and an amendment to the legislation has been recommended in the Zebra Mussel Management Strategy for NI 2004-2010. The Strategy also recommends close co-operation with EPA and NPWS to ensure legislation is in harmony.</p>
<p>Conservation (Natural Habitats etc) Regulations (NI) 1995 – as amended in 2004 and 2007 (SR No. 380)</p>	<p>The 1995 Regulations transpose the main provisions of the Habitats Directive into NI law. The 2007 amending Regulations (SR No. 1843) represents a significant amendment to the original legislation and allow for enhanced implementation of the Habitats Directive.</p>	<p>The 2007 Regulations require people seeking consents for plans or projects to provide information which allows the competent authority to decide if an appropriate assessment is required.</p> <p>They also expressly require appropriate assessment of land use plans. In the context of the Melvin catchment the forthcoming review of the Fermanagh Area Plan 2007 will now be subject to an appropriate assessment in terms of its impacts on Lough Melvin and other Natura 2000 sites in the plan area. No equivalent measure has been introduced in Ireland.</p>
<p>Northern Ireland Biodiversity Strategy</p>	<p>Adopted in August 2002, the Strategy is NI Government's response to the Convention on Biological Diversity (CBD) adopted by UK in 1992. It describes the main features of biodiversity in NI, including the identification of priority habitats and species. It also lists 76 measures to support biodiversity conservation over the period up to 2016.</p> <p>EU Member States are now committed to halting biodiversity loss by 2010, under the Gothenburg Protocol.</p>	<p>Mesotrophic lakes are listed as a Priority Habitat in the strategy.</p> <p>The Strategy contains a number of recommendations which are relevant to water quality in the Melvin catchment. These include:</p> <p>Rec 7 – use the new agri-environment programme to promote agricultural practices which encourage minimal use of fertilisers and reduce pollution Rec.35 – develop and implement a eutrophication control strategy</p>

Table 4 – Republic of Ireland legislation/controls

Legislation/control	Purpose/objective	Relevance to management of Lough Melvin Catchment
<p>European Communities (Natural Habitats) Regulations, 1997 – 2005</p> <p>S.I. No. 94/1997</p>	<p>These Regulations transpose the 1992 EU Habitats Directive into Irish Law.</p> <p>They provide for the creation and protection of Special Areas of Conservation which make up a network of sites of European importance for nature, known as <i>Natura 2000</i>. Among other things, the Regulations set out protection and decision-making procedures for Sites of Community Importance, which incorporates the Natura 2000 network (both SACs and sites designated as Special Protection Areas – SPAs – under the 1979 EU Birds Directive)</p>	<p>The catchment contains two SACs (Lough Melvin and Aroo Mountain) and part of one SPA (Sligo Leitrim Uplands).</p>
<p>Wildlife Acts 1976-2000</p>	<p>This Act provides a statutory basis for Natural Heritage Areas (NHAs) and sets out statutory protection for wild birds, plants and animals.</p>	<p>Four NHAs exist within the catchment: Aroo Mountain Lough Melvin Dough / Thur Mountains Aghavoghil Bog</p>
<p>Planning and Development Act 2000</p>	<p>This requires planning authorities to include biodiversity objectives in County Development Plans, including objectives for the protection of important wildlife sites.</p>	<p>Relevance to catchment depends on how this is reflected in County Development Plans</p>
<p>Leitrim County Development Plan</p>	<p>Sets out Local Authority policies for the protection of nature conservation</p>	<p>Depending on the level of importance placed on important features in the catchment, the County development Plan could be a highly useful tool in protection of water quality and biodiversity.</p>
<p>Draft Conservation Plan for Lough Melvin cSAC</p>	<p>Sets out nature conservation objectives for the Lough Melvin cSAC</p>	<p>This should be an important document but is out of date and has not been published.</p>

Land-use planning

Table 1 – EU Legislation

Legislation/control	Purpose/objective	Relevant Issues
<p>Council Directive 97/11/EC on the assessment of the effects of certain public and private projects on the environment</p> <p>EIA Directive</p>	<p>Amends Directive 85/337/EEC. Sets out requirements for environmental impact assessment of projects. Lists development types for which EIA is mandatory and gives Member States discretion to require EIA for other developments, depending on their nature, scale and location. Guidance is provided on when EIA for such developments should be requested. The Directive also includes guidance on what information should be included in an Environmental Statement.</p>	<p>Article 7 of the original EIA Directive (amended by Article 1 of 97/11/EC) sets out requirements for trans-boundary EIA. There are few examples of this approach being taken between NI and RoI, and none known within the Melvin catchment.</p>
<p>Council Directive 2001/42/EC on the assessment of the effects of certain plans and programmes on the environment</p> <p>SEA Directive</p>	<p>Requires strategic environmental assessment to be undertaken of certain plans and programmes including land-use plans</p>	<p>The forthcoming Fermanagh Area Plan review will be subject to an SEA under this Directive, and the NI Rural Development programme was also subjected to SEA under the Directive.</p>

Table 2 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>Regional Development Strategy for NI 2025</p>	<p>The RDS addresses a range of economic, social, environmental and community issues, which are relevant to delivering the objectives of achieving sustainable development and social cohesion in Northern Ireland.</p> <p>It provides the spatial planning context for:</p> <ul style="list-style-type: none"> • strengthening the competitiveness of the regional economy and tackling social and economic disadvantage; • protecting and enhancing the physical, natural and man-made assets of the Region; • housing, transport, air and water quality, energy and waste strategies; and • development plans and for guiding public and private investment decisions relating to land use. 	<p>The RDS provides a framework for land-use planning and development across NI. It contains Strategic Planning Guidelines (SPGs), some of which are relevant to the situation within the Melvin catchment. These include:</p> <p>SPG RNI 1.3 – sustain and extend the forestry resources of NI</p> <p>SPG RNI 1.4 – sustain a viable fishing industry in NI</p> <p>SPG ENV 1.2 – protect and manage areas designated for their scientific interest.</p> <p>All new Area Plans must be in conformity with the provisions of the RDS, and this will be relevant to the forthcoming Fermanagh Area Plan review.</p>
<p>Fermanagh Area Plan 2007</p>	<p>Sets out policies and proposals to guide development decisions in Fermanagh District Council area up to the year 2007. The Plan is the vehicle for co-ordinating policies of various agencies to provide a coherent strategy for the future development and conservation of Fermanagh, applying the principle of sustainable development.</p>	<p>The Plan is currently under review, although no Draft plan or Issues Paper has yet been produced for consultation.</p> <p>The most significant policies relating to the Melvin catchment include:</p> <ul style="list-style-type: none"> • Designation of Lough Melvin shoreline as Countryside Policy Area (Nat Env 2) – CPA policies have now been superseded by PPS 14. • Protection of semi-natural habitats including lakes and wetlands (Nat Env 3) • Protection of loughs and rivers from the impact of new development (Nat Env 5) • Development in villages – Garrison limit of development (S4)

Legislation/control	Purpose/objective	Relevant Issues
<p>Planning Policy Statement 2 (PPS2) Nature conservation</p>	<p>Provides policies which contribute to the conservation of wildlife and their habitats, and to minimise adverse effects on wildlife where conflict of interest is unavoidable.</p> <p>The PPS also provides a policy basis for the implementation of the government's international obligations for nature conservation through EU Directives and the Ramsar Convention.</p>	<p>Provides a tiered approach to site protection. Policy relating to Natura 2000 sites strongly reflects wording of Article 6 of the Habitats Directive.</p> <p>PPS2 is currently under review and the updated version will better reflect the requirements of the Birds and Habitats Directives.</p> <p>There is no equivalent policy statement for Ireland, meaning that the level of protection provided to wildlife sites (including Natura 2000) is extremely variable between County Development Plans.</p>
<p>Draft Planning Policy Statement 14 (PPS14) Sustainable Development in the Countryside</p>	<p>Reinforces the commitment to conserve the landscape and natural resources of the rural area and to protect them from excessive, inappropriate or obtrusive development and from the actual and potential effects of pollution.</p> <p>Places restrictions on single dwellings in the countryside unless certain specific criteria are met.</p>	<p>Although still in draft and currently under review PPS14 is live planning policy. Responsibility for rural planning policy moved from DRD to DOE in October 2007 following a court ruling.</p> <p>The policy is likely to reduce the level of new single dwelling applications in the Melvin catchment area, with potentially beneficial effects on water quality. Septic tank discharges may be a key factor in determining water quality in the catchment.</p>
<p>Planning (NI) Order 1991 (SI No.1220)</p>	<p>This consolidates the 1972 Order and other legislation amending that Order. It contains all the key provisions empowering the Department as the planning authority for NI, including development plan preparation, development control procedures and enforcement.</p> <p>It also provides for the continuation of the appellate body – the Planning Appeals Commission.</p>	<p>Relevant to all planning decisions within the Melvin catchment.</p> <p>Unlike RoI, there is no third party appeal procedure under the Planning Order. The PAC can only hear appeals from applicants, in addition to public inquiries and other hearings.</p>

Legislation/control	Purpose/objective	Relevant Issues
Strategic Planning (NI) Order 1999 (SI No. 660)	This Order requires the Department for Regional Development to formulate a regional development strategy for Northern Ireland and co-ordinate its implementation.	While not directly applicable to Lough Melvin, the RDS does contain Strategic Planning Guidelines which could potentially influence land-use in the Melvin catchment.
Planning (Amendment) (NI) Order 2003 (SI No. 430)	The Order introduces new enforcement powers. These include: <ul style="list-style-type: none"> • the power to issue planning contravention notices and breach of condition notices; and • an express power to apply to the court for an injunction to prevent a threatened breach of planning control. It also improves control over development including: <ul style="list-style-type: none"> • a regulation making power to allow the scope of regulations requiring environmental assessment under EIA Directive to go beyond the EC minimum requirements; • giving prime importance to development plans in the determination of planning applications; • amends the Strategic Planning (Northern Ireland) Order 1999 to require planning policies and development plans to be "<i>in general conformity with</i>" the regional development strategy. 	While the development control and enforcement provisions are relevant to all planning issues within the catchment area, perhaps the most relevant aspect is the confirmation of the primacy of development plans. This means that the treatment of the Melvin catchment in the forthcoming Fermanagh Area Plan review is of particular importance.
Planning Reform (NI) Order 2006 (SI No. 1252)	Introduces various minor reforms to the NI planning system. These include: <ul style="list-style-type: none"> • confirmation of the primacy of development plans • statutory duty on DOE and PAC to contribute to the attainment of sustainable development in the exercise of their functions. • removal of Crown immunity in relation to planning determinations 	No specific issues of relevance to the Melvin catchment
Planning (General Development) Order (NI) 1993 (as amended) (SI No. 278)	Specifies certain classes of activity, known as permitted development, which does not require planning permission.	Permitted developments are equivalent to exempted developments under the Planning and Development Act 2000 in Ireland. In the Melvin catchment, the most relevant types of permitted development are structures relating to agricultural and forestry.

Legislation/control	Purpose/objective	Relevant Issues
<p>The Planning (General Development) (Amendment No. 2) Order (Northern Ireland) 2007 (SI No. 432)</p>	<p>This amends the 1993 Order by extending until 31st December 2008 the period during which the maximum permitted size of:</p> <p>(i) a building or excavation used or to be used for the storage of slurry or manure; or</p> <p>(ii) a building or structure used for both the accommodation of livestock and the storage of slurry or manure,</p> <p>is increased from 300 square metres to 600 square metres.</p>	<p>This extends the time for PD status to new slurry storage facilities of a larger size than previously permitted, as introduced under the 2005 Amendment Order.</p>
<p>Planning (EIA) Regulations (NI) 1999 (SR No. 73)</p>	<p>These Regulations implement in Council Directive 85/337/EEC as amended by Council Directive 97/11/EC.</p> <p>The main changes made by Directive 97/11/EC, which these Regulations implement are increased coverage of the types of development requiring environmental impact assessment (EIA); a requirement for individual determinations; clarification of the way in which or whether EIA is required for every Annex II project exceeding the thresholds established by the Member States; enhanced consultation arrangements with other Member States where projects are likely to have significant transboundary effects.</p>	<p>See EIA Directive above</p>
<p>The Environmental Assessment of Plans and Programmes Regulations (Northern Ireland) 2004 (SR No. 280)</p>	<p>These Regulations implement Directive 2001/42/EC (SEA Directive).</p> <p>The requirement for environmental assessment applies, in particular, to any plan or programme prepared for agriculture, forestry, fisheries, energy, industry, transport, waste management, water management, telecommunications, tourism, town and country planning or land use.</p>	<p>See SEA Directive above</p>

Table 3 – Republic of Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>European Communities (Environmental Impact Assessment) Regulations 1989-1999 (S.I. No. 93 of 1999)</p>	<p>These Regulations transposed the EIA Directive into Irish law.</p>	<p>Requires the EIA of certain projects likely to have a significant impact on the environment. Potential to help safeguard the ecological status of Lough Melvin.</p>
<p>European Communities (Environmental Impact Assessment)(Amendment) Regulations 2001 (S.I. No. 538 of 2001)</p>	<p>Provides for enhanced measures to take account of the nature, location and cumulative effects of projects below specified thresholds when considering if an EIA should be required. The amendment was a response to EU concern over the failure to transpose the 1985 Directive adequately to cover afforestation and peat extraction.</p>	<p>Impacts of sub-threshold forestry may be highly relevant in the catchment. Peat extraction may also be relevant.</p>
<p>European Communities (Environmental Impact Assessment)(Amendment) Regulations 2006 (S.I. No. 659 of 2006)</p>	<p>Provides for revised procedures to enhance public participation in the environmental impact assessment of projects having transboundary environmental impacts.</p> <p>This is in response to Directive 2003/35/EC (Public Participation Directive)</p>	<p>There is potential for transboundary impact of projects in the catchment, notably with respect to impact on water quality.</p>
<p>Planning and Development Acts 2000-2002</p>	<p>These are wide-ranging Acts.</p> <p>With respect to water quality, they provide local authorities (who are also planning authorities) with the power to:</p> <ul style="list-style-type: none"> • make provision for waste water services and other matters relevant to water management in development plans; • control the location of developments likely to cause water pollution or which are likely to work against water management objectives; • refuse permission to, or make controlling conditions on, developments which may cause pollution or work against water management objectives. <p>Local Authorities are bound to have regard for groundwater protection under the Act.</p> <p>Planning Authorities must notify appropriate Fisheries Boards when they receive an application for development that may result in significant</p>	<p>Potential to facilitate sustainable planning in the catchment.</p>

	<p>changes to ground or surface waters, give rise to significant discharge of pollutants or which may materially affect waters.</p> <p>This Act also requires planning authorities to include biodiversity objectives in County Development Plans, including objectives for the protection of important wildlife sites. The Act also consolidates the position on Environmental Impact Assessment.</p>	
Planning and Development Regulations 2001 and 2005	<p>Implement details of the PDA, including listing developments requiring mandatory EIA. The 2005 regulations amend the Planning and Development Regulations 2001 in relation to peat extraction. They facilitate consideration of the need for EIA of any peat extraction in Natura 2000 sites or NHAs. However, they also confirm that extraction of less than 10 hectares outside such sites cannot have a significant effect on the environment.</p>	<p>High thresholds for mandatory could lead to avoidable damage of habitats in catchment if EIA not required</p>
Local Government (Planning and Development) (Amendment) Regulations, 2001	<p>These Regulations introduced a statutory consent system, by the Minister for the Marine and Natural Resources, for initial afforestation. They reduced the mandatory threshold for EIA of peat extraction from 50 hectares to 30 hectares. They also amended the Wildlife (Amendment) Act, 2000 and the European Communities (Natural Habitats) Regulations, 1997 to allow for the possibility of EIA for peat extraction in NHAs and SACs, below the 10 hectare threshold, where the project is likely to have significant effects on the environment</p>	<p>As above</p>
National Development Plan 2007-2013	<p>The national Development Plan sets out the economic and social investment priorities for the period 2007-2013.</p> <p>It follows a number of key themes, including environmental sustainability and provides for specific issues, including the further funding of phosphorous removal from waste water treatment plants for the protection of surface waters, and the National Nitrates Action Programme.</p>	<p>Potential need for phosphorous removal (although it already exists at Kinlough).</p>
Regional Planning Guidelines for the Border regional Authority	<p>Provides a framework within which County Development Plans sit.</p> <p>The guidelines raise important issues at a strategic level and provide general policies which should be reflected in planning at a local level.</p> <p>Regionally Significant Issues highlighted in the plan include:</p>	

	<ul style="list-style-type: none"> • a regional acceptance of the quality and fragility of the high amenity and outstanding landscapes in accordance with EU designations; • cross boundary regional impact associated with some environmental threats, which require regional and inter-county co-operation at executive level (key county and regional personnel) to deal with issues, e.g. pollution; 	
<p>Leitrim County Development Plan 2003-2009</p>	<p>Provides the planning framework for the County</p>	<p>The County development plan is currently under review. Public consultation on the new plan is likely to start in spring 2008. This provides an important opportunity to raise any perceived gaps in coverage of Lough Melvin issues at a policy level.</p> <p>There is concern over the level of building in some parts of the catchment, notably around Kinlough</p>
<p>EPA Waste Water Treatment Manual 2000 – Treatment systems for single houses</p>	<p>Lays out the appropriate treatment standards for one-off houses in different environmental conditions (soil types etc)</p>	<p>L Melvin catchment is apparently unsuitable for septic tanks according to the Manual. Standards are currently expected to be updated. It is hoped that they may include issues such as tertiary treatment through constructed wetlands.</p>

Forestry

Table 1 – EU legislation

Legislation/control	Purpose/objective	Relevant Issues
<p>Council Regulation (EC) No.1698/2005 on Support for Rural Development by the European Agricultural Fund for Rural Development (EAFRD).</p> <p>Rural Development Regulation</p>	<p>See also Agriculture section.</p> <p>Provides direction to and support for agriculture and rural development in Member States which is compatible with CAP reforms. A key element is the support of woodland and forestry schemes including Woodland Grant Scheme and Farm Woodland Premium Scheme.</p>	<p>Provides support for agri-environment and woodland grant schemes in Member States.</p>

Table 2 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>Forestry Act (Northern Ireland) 1953</p>	<p>Under the terms of the Forestry Act (Northern Ireland) 1953, the Department is responsible for promoting the interests of forestry in Northern Ireland, the development of afforestation, the production and supply of timber and the maintenance of adequate resources of growing trees.</p>	<p>A review of the Act has been initiated to improve the legislative basis for forest policy, including a greater reflection of sustainability issues and the multi-uses of forests in NI.</p>
<p>EIA (Forestry) Regulations (NI) 2006 (SR No.518)</p>	<p>Replace the EIA (Forestry) Regulations (NI) 2000 which provided for the implementation in relation to forestry projects of Council Directive 85/337/EEC as amended by Council Directive 97/11/EC.</p> <p>They require anyone who wishes to carry out a project including afforestation, deforestation, forest road works or forest quarry works that is likely to have significant effects on the environment to obtain consent for the work from the Department of Agriculture and Rural Development.</p>	<p>The Regulations apply both to private and public sector forestry activity. Thresholds are set for when an EIA may be required for a relevant project. Relevant projects are those which would have a significant effect on the environment. Outside sensitive areas the threshold for afforestation is 5 hectares and 1 hectare for deforestation.</p> <p>This represents a significant variance from the</p>

		situation in Ireland where the threshold set for mandatory EIA is 50 hectares for afforestation and 70 for felling, and the scope for sub-threshold EIA is arguably more restricted.
NI Rural Development Plan (NIRDP)	<p>Provides a comprehensive programme for agriculture and rural development in NI between 2007 and 2013 under the EU Strategic Guidelines.</p> <p>Axis 2 is targeted at improving the natural environment, including water quality. Measures will include support through Less Favoured Areas Compensatory Allowances Scheme, Agri-Environment Programme and forestry expansion.</p> <p>See also agriculture section</p>	<p>Contains measures for woodland expansion, especially at the farm scale.</p> <p>The switch to decoupled support, may reduce the opportunity cost of land and create openings for alternative land use, such as private sector forestry or woodland (First Afforestation of Agricultural Land). The potential impacts on the catchment of increased afforestation will depend on the nature and location of new planting.</p>

Policies and Guidelines	Purpose/objective	Relevant Issues
UK Forestry Standard 2nd Edition 2004	<p>The purpose of the UK Forestry Standard is to set out standards for the sustainable management of all forests and woodlands in the UK. It includes a series of sustainable forest management requirements and targets. These include the protection of water quality. Targets include evidence that:</p> <ul style="list-style-type: none"> • an acceptable standard of forest design is applied to water margins; • opportunities are taken to improve riparian zones in the course of forest operations; • all operations are planned and are carried out to minimise disturbance to watercourses and to avoid pollution and siltation. 	<p>The standards for water quality are of particular importance in the Melvin catchment where forestry activity has been identified as a key influence on water quality. The effective implementation of these standards is essential in the context of meeting the Water Framework and Habitats Directive objectives.</p>
UK Woodland Assurance Standard (UKWAS)	<p>A voluntary certification standard for the independent certification of forest management in the UK which is compatible with the UK Forestry Standard. The standard was developed – and is managed by – a broad partnership of forestry, environmental and social organisations in response to increasing demand for products from certified forests. Woodlands that satisfy the requirements of the UKWAS are being managed to a standard recognised and endorsed by UK and international forestry, environmental and social organisations.</p>	<p>Forest Service holds the Certificate of Good Forest Management under the scheme. The requirements of the scheme influence forest management in the catchment, including the phasing of felling as far as is practicable, so as to avoid clear –felling of large areas in one year.</p>

Policies and Guidelines	Purpose/objective	Relevant Issues
Forests and Water Guidelines (Forestry Commission, 4th Edition 2003)	Sets out water protection and riparian management standards with which forest managers are required to comply in relation to forest design planning and management of forestry operations which might affect water bodies.	These guidelines are extremely important in the context of the Melvin catchment. They provide detailed guidance on how to minimise adverse impacts during ground preparation, harvesting etc
'Afforestation – the DANI Statement on Environmental Policy' (DANI 1993)	Sets out the government's approach to afforestation taking into consideration the need to conserve priority habitats, including wetlands.	As a result of this policy, Forest Service ceased new planting on certain habitats including blanket bog. This has precluded any large scale new planting in the upland areas of the Melvin catchment.
Strategy for the Restoration of Open Ground Semi-natural Habitats (November 2002).	This strategy includes criteria for identifying, evaluating and prioritising sites, as well as an analysis of Forest Service properties and a list of twenty candidate sites meriting further consideration for restoration. Priority is given to sites adjacent to existing open space that already holds a conservation designation. The Strategy also considers future actions required for successful restoration. This scheme has arisen through UKWAS requirements.	Potential for forestry areas within the Melvin catchment to be restored once felled. This could have dual benefit of meeting biodiversity objectives and reducing potential water quality impacts. However the list of sites has been reduced to seven and so far only Slieve Beagh (not in Melvin catchment) has been confirmed for restoration work.
Environmental Guidelines for Timber Harvesting	Produced in 1998/9, this document provides guidance on how to minimize or avoid effects on water, soils, landscape and nature conservation.	There is an equivalent set of guidelines for forestry activity in RoI.
Woodland Grant Scheme	<p>This scheme aims to encourage the creation of new woodlands and the management of existing woodlands by providing money towards the cost of the work involved.</p> <p>Over 548 hectares were planted across NI in 2006/7 under the scheme. 92% involved broadleaved species, although 40% of this was for energy plantations.</p>	There is potential for the use of Woodland Grant Scheme planting in the Melvin catchment as nutrient-stripping buffer strips between farmland and watercourses. This is not specifically promoted in the scheme brochures, although Buffer Strips (for water quality) are a prescription within the agri-environment schemes (ESAs and Countryside Management Scheme).
Farm Woodland Premium Scheme	This scheme operates in conjunction with WGS and is designed to encourage the creation of new woodlands on farms through annual payments which help offset the loss of earnings resulting from taking the land out of agriculture. Payments are made over a period of 10 or 15 years.	See Woodland Grant Scheme

Table 3 – Republic of Ireland legislation/controls

Legislation	Purpose/objective	Relevant Issues
<p>Forestry Acts 1946-1988 Felling of trees</p>	<p>Landowners are required under the Forestry Act, 1946, to give notice of intention to fell trees, following which prohibition orders are normally served. These remain in force pending the issue of a Limited Felling License, which can include environmental and replanting conditions.</p> <ul style="list-style-type: none"> • The processing of tree felling licences as required by the Forestry Act 1946 • liaising with relevant competent authorities to ensure felling is not incompatible with the protection of the environment • setting replanting and preservation conditions and ensuring compliance with obligations • investigation of alleged illegal felling • monitoring and regulating of Coillte Teoranta’s annual felling and replanting activities 	<p>Large scale felling can be an issue with respect to nutrient peaks in the system. Felling licences provide time for Local Authorities etc to visit a site if necessary to check need for / adequacy of temporary sumps and other measures</p> <p>Felling is a particular issue on deep peat where the resultant brash is used on the ground to facilitate work, resulting in large nutrient inputs into the system.</p>
<p>EC (Environmental Impact Assessment) Regulations 1989-2001</p>	<p>The 2001 Regulations were a response to try and take better account of the nature, location or cumulative effects of projects below specified thresholds when considering when an EIA should be required.</p> <p>Thresholds: EIS required:</p> <ul style="list-style-type: none"> • For initial afforestation of an area greater than 50 hectares • For the replacement of broadleaf high forest by conifer species where the area involved is over 10ha; • For deforestation for the purpose to conversion for other types of use where the area is greater than 10ha in the case of natural woodland or 70ha in the case of coniferous forest <p>There is an option for the minister to require EIS for afforestation of less than 50ha when proposal is likely to have severe effects on the environment</p>	<p>The Lough Melvin catchment holds a significant area of both state and private forestry. There is still considerable scope for additional private forestry in the area.</p> <p>These thresholds are likely to result in less scope for EIA for forestry projects than in NI.</p>

Legislation	Purpose/objective	Relevant Issues
<p>Planning and Development Act 2000</p> <p>Planning and Development Regulations 2001</p>	<p><i>Exempted development.</i></p> <p>Section 4(1)(i) covers development consisting of the thinning, felling and replanting of trees, forests and woodlands, the construction, maintenance and improvement of non-public roads serving forests and woodlands and ancillary works, not including the replacement of broadleaf high forest by conifer species.</p> <p>Note that none of the above is exempted if an EIA is required.</p>	<p>There is a potential for significant works without the need for consents. The equivalent of exempted development in NI is known as “Permitted Development”, under the Planning (General Development Order) (NI) 1993. Most forestry activities in NI are also classes as permitted developments.</p>
<p>European Communities (Aerial Fertilisation) (Forestry) Regulations 2006</p> <p>S.I. No. 592 of 2006</p>	<p>Introduced under the EU Dangerous Substances Directive (see Water Quality section). These regulations set out the limit and manner in which aerial fertilizer may be applied to forest stands to prevent impact on the aquatic environment.</p> <p>The legislation sets out the requirement for</p> <ul style="list-style-type: none"> • An aerial fertilisation license • Consultation with the Local Authorities, Fisheries, River Basin District and Department of the Environment, Heritage and Local Government • Protection of European sites. • Powers of inspection <p>Note that Forest Service Guidance notes on aerial fertilisation are currently being updated in response to these regulations.</p>	<p>Potential benefit to the catchment since it provides the opportunity to refuse aerial fertilisation if there is significant concern over the potential impact on L Melvin.</p> <p>No equivalent Regulations have been introduced into Northern Ireland.</p>
<p>European Communities (Environmental Impact Assessment) (Forestry Consent System) (Amendment) Regulations 2006</p> <p>S.I. No. 168 of 2006</p>	<p>These provide for revised procedures to enhance public participation in the environmental impact assessment of projects.</p> <p>This is in response to Directive 2003/35/EC (Public Participation Directive)</p>	<p>No direct relevance to the Melvin catchment as the existing EIA thresholds etc were not amended.</p>

Policies and Guidelines	Purpose/objective	Relevant Issues
Forestry and water quality guidelines	<p>These aim to promote best practice in sensitive areas (including designated areas and areas sensitive to acidification and erosion). They provide guidelines on many issues including:</p> <ul style="list-style-type: none"> • Buffer zones • Ground preparation and drainage • Fertiliser application and storage • Chemicals, fuels and machine oils • Roads • Bridges, culverts, fords • Harvesting 	<p>Equivalent to the Forestry Commission guidelines in use in NI. Potentially useful in reducing impacts, depending on the level of implementation.</p>
Forestry Biodiversity Guidelines	<p>These aim to set out sound and practical measures based on the principles of Sustainable Forest Management (SFM). The guidelines describe a range of measures intended to cover all situations relating to forestry and biodiversity.</p> <p>They apply to all grant-aided projects and to all activities associated with a Felling Licence. Any breach may result in the forfeit of grant aid and premium payment or the withdrawal of a Felling Licence.</p>	<p>Potentially useful in reducing adverse impacts to biodiversity and water quality. Involves similar principles and measures to the UKWAS process in the UK.</p>
Forest harvesting and the environment guidelines	<p>These address issues relating to:</p> <ul style="list-style-type: none"> • soil conservation; • the protection of water quality, archaeological sites, biodiversity and the visual landscape; • the maintenance of forest health and productivity. 	<p>Potentially useful in reducing impacts. There is an equivalent set of guidelines for forestry activity in NI.</p>
Forestry and Aerial Fertilisation Guidelines	<p>These Guidelines are currently being revised to reflect the introduction of new legislation for aerial fertilisation of forests.</p>	<p>No equivalent in NI</p>
Forestry and the Landscape Guidelines	<p>The objectives of the Forestry and the Landscape Guidelines are as follows:</p> <ul style="list-style-type: none"> • To ensure a positive relationship between the forest and the character of a given landscape as a whole - to achieve balance of land cover. • To optimise aesthetic effect through the integration of forests with landscape – to complement landscape integrity. • To minimise visual conflict and the loss of characteristics - to retain and/or increase existing character and diversity. • To mitigate adverse impacts of forest operations, including harvesting. 	<p>Limited obvious impact, but resistance to forestry in some locations for landscape reasons may have spin-off impacts on water quality.</p>

Schemes	Purpose/objective	Relevant Issues
<p>The Forest Environment Protection Scheme (FEPS)</p>	<p>The Forest Environment Protection Scheme (FEPS) aims to encourage the establishment of high nature value forestry on farms which participate in REPS.</p> <p>One aim is 'to encourage farmers to establish and maintain high nature value forestry through measures such as increasing biodiversity and protecting water quality'. Producing commercial timber is also listed as an objective of FEPS but the strong emphasis is on the environment.</p> <p>An additional premium of up to €200 per hectare for five years will be available to farmers who join FEPS. The usual forestry premium will also apply for 20 years along with the 100% grant for planting.</p>	<p>Impact depends on option(s) chosen (options are not targeted). Broadly equivalent to the Buffer Strip woodland prescriptions in the ESA and Countryside Management Schemes.</p>
<p>Neighbourwood scheme</p>	<p>This Scheme provides support to local authorities, private landowners and others to develop attractive close-to-home woodland amenities (or 'neighbourwoods') for public use and enjoyment.</p> <p>It provides grants and premiums (where applicable) for enhancing existing woodland, establishing new woodland and installing recreational facilities.</p>	<p>Potential for water quality benefits.</p>
<p>Native woodland scheme</p>	<p>This Scheme provides opportunities to protect and expand Ireland's native woodland resource and associated biodiversity. It also supports a wide range of other benefits and functions arising from native woodlands, relating to landscape, cultural heritage, wood and non-wood products and services, the practice of traditional woodland management techniques, environmental education, and carbon sequestration.</p> <p>The Scheme provides financial support for landowners under two separate elements. Element 1: Conservation supports the protection and enhancement of existing native woodlands and the conversion, where appropriate, of existing non-native forests to native woodlands. Element 2: Establishment supports the establishment of new native woodlands on greenfield sites.</p> <p>Participation in the Scheme is voluntary.</p>	<p>Broadly equivalent to Woodland Grant Scheme in NI. Promotion of new riparian woodlands could help intercept nutrient-rich run-off from farmed areas – perceived to be a concern among stakeholders.</p>

Fisheries

Table 1 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
Fisheries Act (NI) 1966 (as amended)	<p>The Act set out the responsibilities of the Department (originally Agriculture) for fisheries in NI, including promotion of angling and development of angling facilities etc. It allows for fish culture licences, protection of fisheries from pollution, abstraction etc, and establishes the FCB (Part II). Amended to make DCAL responsible for salmon and inland fisheries.</p> <p>In Northern Ireland the introduction of non-native species of fish, eggs and gametes is covered by the Fisheries Act, and the Fish Health Regulations (Northern Ireland) 1998.</p>	<p>Under Section 13 the Department can make an order to prohibit introduction of any kind of fish (or eggs) into any waters. This is relevant to the potential introduction of species such as pike into the Lough Melvin system.</p>
Fish Health Regulations (NI) 1998 (SR No. 310)	<p>The Regulations prohibit the introduction into Northern Ireland from elsewhere in the EU of live fish or eggs except for tropical fish kept permanently in aquaria and live molluscs, eggs and gametes unless they are accompanied by appropriate movement documents;</p>	<p>These Regulations are perhaps less relevant to Lough Melvin as the main threats to the Lough already occur in Northern Ireland.</p>
Fisheries (Amendment) (NI) Order 1991 (SI No. 1466)	<p>Introduced miscellaneous amendments to the Fisheries Act (Northern Ireland 1966 (c. 17).</p> <p>The principal amendments—</p> <ul style="list-style-type: none"> (a) extend the powers of the Department of Agriculture to secure the development of derelict waters for angling (Article 4); (b) alter procedures relating to applications for fish culture licences (Article 6); (c) enable the Fisheries Conservancy Board to restore the fish population of polluted waters in certain circumstances (Article 11); (d) facilitate the passage of fish past obstructions and hazards (such as dams and mill sluices) in waterways (Articles 13, 15 and 16); (e) limit the duration of the appointment of private water bailiffs (Article 25); and (f) alter the enforcement powers of authorised persons (Articles 26 to 30). 	

<p>Surface Waters (Fishlife) (Classification) (Northern Ireland) Regulations 1997 (SR No.488) (as amended 2003 and in 2007 to reflect the 2006 Directive).</p>	<p>Transposes the Freshwater Fish Directive into NI law. See also Water Quality Section.</p> <p>They prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by DOE to determine compliance with the standards.</p>	<p>Later transposition in NI than RoI (1988). No equivalent Regulations yet In RoI to reflect the 2006 amendment and consolidation of the Directive.</p>
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Table 2 – Republic of Ireland legislation/controls

Legislation/control	Purpose/objective	Relevant Issues
<p>EC (Quality Of Salmonid Waters) Regulations, 1988 SI 293 of 1988</p>	<p>See also Water Quality section.</p> <p>The Regulations give effect to the Freshwater Fish Directive. They prescribe quality standards for salmonid waters and designate the waters to which they apply, together with the sampling programmes and the methods of analysis and inspection to be used by local authorities to determine compliance with the standards.</p> <p>Local authorities are required to carry out sampling of waters as specified. Where salmonid waters do not comply with specified standards the local authority is to establish the reasons why and adopt programme to reduce pollution and ensure compliance with standards. Local authority is to establish and maintain register of sampling results which are to be available for public inspection.</p> <p>There has been no national response to the 2006 Freshwater Fish Directive.</p>	<p>No waters within the L Melvin catchment are listed in Schedule 1 of the Regulations (salmonid waters), although the Lough has been designated in NI.</p>
<p>Fisheries Acts 1959-2003</p>	<p>Section 171 of 1959 Act makes it an offence to throw, empty permit or cause to fall into any waters any deleterious matter. Section 172 of the Act requires that special precautions shall be taken where any receptacle used for containing or conveying any deleterious matter is within 30 yards of any waters.</p>	<p>Provides for a level of protection to the water bodies in the catchment.</p> <p>Importance of spawning sites for salmonids (and their limited number) in the catchment suggest that S173</p>

	<p>S173 relates to Protection of Fishing Waters from Poisoning and Pollution and it has been used in situations where heavy machinery enters spawning rivers during the close season.</p> <p>The Fisheries Boards can also initiate legal proceedings under the specific sections of The Local Government Water Pollution Acts 1977-1990</p>	<p>may be important</p>
<p>Local Government (Water Pollution) Act 1977</p> <p>Local Government (Water Pollution) Act 1990</p>	<p>These Acts include a general prohibition on entry of polluting matter to waters and Local Authorities are assigned the primary responsibility for the control of pollution to waters.</p> <p>“Polluting matter” is defined in the Act of 1977 as being “any poisonous or noxious matter, and any substance, the entry or discharge of which, into any waters is liable to render those or any other waters poisonous or injurious to fish, spawning ground or the food of any fish, or to injure fish in their value as human food, or to impair the usefulness of the bed and soil of any waters as spawning grounds or their capacity to produce the food of fish or to render such waters harmful or detrimental to public health or to domestic, commercial, industrial, agricultural or recreational uses”.</p> <p>See also Water Quality Section</p>	<p>Provide for a level of protection to the water bodies in the catchment.</p>
<p><i>Bye-laws made under Fisheries Acts</i></p>	<p>A number of byelaws are made on an annual basis. These largely relate to managing fish stocks (notably salmon and sea trout) through measures such as enforced catch and release, use of barbless hooks, bait limitations, tagging and closing of fisheries.</p>	<p>Potentially important with respect to direct protection of salmonid stocks by limiting harvesting in certain years and at certain times.</p>
<p>The Wild Salmon and Sea Trout Tagging Scheme Regulations (No. 2) 2006 (S.I. No 672 of 2006)</p>	<p>These Regulations set out the quotas on a river-by-river basis, the mechanism for allocating overall quotas between commercial fishermen and anglers and individual commercial fishermen’s quotas. The regulations specify the quotas for each of the rivers that are open for fishing in 2007. In addition, in order to protect the spring salmon (multi sea winter fish) only one tag may be issued per angler up to 12 May 2007. Some flexibility has been built into the text of the regulations allowing for changes in this limit in appropriate circumstances through river specific byelaws.</p>	<p>There is concern over the difference between bag limits in NI and RoI, particularly with respect to Spring Salmon. In RoI there is a bag limit of 1 fish per day up to a total of 3 fish per angler between opening day and 11 May (in order to protect spring stocks). In NI there seems to be a limit of one fish per day but not total limit per angler during the spring salmon season.</p>

Waste Management

Table 1 – Northern Ireland legislation/controls

Legislation/control	Purpose/objective	Issues
NI Waste Management Strategy 2006-2020 – Towards Resource Management	Launched on the 30th March 2006 and provides a framework for the development and achievement of effective resource and waste management practices in Northern Ireland.	Sets out targets for reduction of illegal dumping, and proposals for new legislation to deal with the problem.
Waste and Contaminated Land (NI) Order 1997 (SI No. 2778)	Regulates disposal of waste through licensing of facilities and prohibits unauthorised disposal of waste.	
Waste (Amendment) NI Order 2007 (SI No. 611)	Makes certain amendments to the 1997 Order. These include: <ul style="list-style-type: none"> • Powers to stop, search, seize and dispose of vehicles suspected of involvement in the illegal disposal of waste. • Additional powers to investigate incidents or offences relating to illegal waste disposal • Recovery of investigation, enforcement and clean-up costs from offenders. • Increased penalties on conviction. • Introduction of fixed penalty notices for breaches of Duty of Care and Registration of Carriers legislation in relation to the transportation of waste. 	New powers may act as a deterrent to those involved in the illegal disposal of waste in the catchment area.
Waste Management Regulations (NI) 2006 (SR No. 280)	Amends the 1997 Order. The Regulations relate to agricultural waste, and make it controlled waste, of which EHS is regulator. They prohibit the burning or burying of agricultural waste, such as silage plastic, fertiliser bags etc. Farm dumps will need to be licensed by EHS.	Probably not a significant issue within the Melvin catchment area.
Waste Management Licensing Regulations (Northern Ireland) 2003 (SR No.493)	Transferred the responsibility for waste management licensing from district councils to the Department of the Environment.	Fermanagh District Council no longer responsible for licensing waste management in the Melvin catchment.

<p>The Sludge (Use in Agriculture) Regulations (Northern Ireland) 1990</p>	<p>These regulations implement Council Directive 86/278/EEC on the protection of the environment, and in particular soil, when sewage sludge is used on agricultural land. They prohibit the use of sludge from sewage treatment works being spread on agricultural land unless specified requirements are fulfilled. Enforcement of this legislation is carried out by EHS</p> <p>See also Water Quality section</p>	<p>The significance of this issue within the catchment will be investigated during phase two of the project.</p>
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Table 2 – Republic of Ireland legislation/controls

Legislation/control	Purpose/objective	Relevance to management of Lough Melvin Catchment
<p>Waste Management (Use of Sewage Sludge in Agriculture) Regulations 1998-2001</p>	<p>The use of sewage sludge in agriculture is generally viewed as waste recovery.</p> <p>These Regulations prescribe standards for the use of sewage sludge in agriculture. The Regulations give effect to Council Directive 86/278/EEC on the protection of the environment, and in particular of the soil, when sewage sludge is used in agriculture.</p> <p>Use of sewage sludge in agriculture can also be regulated under water pollution legislation and REPS schemes.</p>	<p>The relevance of this issue to the catchment will be investigated during phase two of this project.</p>
<p>Environmental Protection Agency Act, 1992 Act 7 of 1992</p>	<p>The 1992 Act established the EPA, giving it responsibilities for a wide range of licensing, enforcement, monitoring and assessment activities associated with waste management and environmental protection.</p> <p>See also Water Quality section</p>	<p>The activities of the EPA are of general relevance to the management of the catchment.</p>
<p>Waste Management Act, 1996 Act 10 of 1996</p>	<p>This is the principal waste management legislation which redefines the roles of local authorities and the EPA, improves regulatory powers and modernises the waste management framework. The core provisions of the Act include:</p>	<p>The main legislation which prohibits illegal and unlicensed dumping of waste.</p>

<p>Waste Management (Amendment) Act, 2001 Act 36 of 2001</p>	<ul style="list-style-type: none"> • An obligation on a person to take all such reasonable steps to prevent or minimise the production of waste arising from any agricultural, commercial or industrial activity; • A prohibition on the holding, transportation, recovery or disposal of waste in a manner that causes or is likely to cause environmental pollution; • A prohibition on the transfer of waste to a person other than an authorised person; • A prohibition on the recovery or disposal of waste at an unlicensed facility; <p>The primary purpose of the Waste Management (Amendment) Act, 2001 was to provide a legal mechanism by which the first Regional Waste Management Plans could be made.</p>	
<p>Waste Management (Permit) Regulations, 1998 SI 165 of 1998</p>	<p>These Regulations provide for the granting of waste permits by local authorities in respect of specified waste disposal and recovery activities in lieu of a licence by the EPA under the Waste Management Act 1996. The Regulations also provide for the registration by local authorities of the storage of hazardous waste, in excess of specified amounts, at its place of production and for the registration by the EPA of certain waste recovery activities carried on by local authorities.</p>	
<p>Connaught Waste Plan 2006-2011</p>	<p>This plan provides the framework for limiting, disposing and transfer of waste within the region.</p>	
<p>Leitrim Sludge Management Plan</p>	<p>Local authorities are required to prepare a Sludge Management Plan for the collection, treatment and re-use or disposal of all non-hazardous sludge arising within their functional area.</p>	<p>Status of the plan and its relevance to the Melvin catchment will be investigated during phase two work for this project.</p>

Appendix II - Interview Template

LOUGH MELVIN PROGRAMME

EVALUATION OF CONTROLS AND GOVERNANCE

INTERVIEW TEMPLATE

1. Name of interviewee:
2. Organisation represented
3. Position within organisation
4. Role of organisation in managing Lough Melvin catchment
eg Does organisation have a planning function (eg prescribed body/statutory consultee). How well are comments reflected in planning decisions.
5. What legislation/policies or other controls govern your organisation's role in management of the catchment?
6. How effective do you consider these measures to be and can you give any examples where they are having a positive impact?
7. Enforcement. What enforcement action has your organisation taken in last 5 years in relation to protection or management of Lough Melvin?
8. Are you aware of any proposed or potential amendments or updates to these controls?
9. To what extent does your organisation co-ordinate with its cross-border counterpart or other relevant cross-border bodies? What challenges or difficulties arise?

10. What do you consider to be the key issues affecting management of the Lough Melvin catchment?
11. Vision. What is your organisation's vision (if any) in relation to Lough Melvin over the next 5 years?
12. In general terms what is needed to improve management of the catchment?
13. What other barriers, gaps and issues (if any) are affecting management of the catchment, including those relating to your own organisation?
14. Specifically, what actions or initiatives are needed to improve management at Lough Melvin?
 - i) New regulatory regime or system of governance (eg NI reviews of public administration and environmental governance).....
 - ii) New or amended legislation or policies.....
 - iii) New agreements or protocols (eg Service Level Agreements or cross-border agreements).....
 - iv) Enhanced communication, co-ordination or integration.....

Details including examples or supporting data.

15. Catchment Management Group. Do you see a need for the continuation of the CMG for Lough Melvin? Who should be represented (position and grade), what should its remit be? Have you a view on who should chair the group?

Appendix III - List of Interviewees

INTERVIEW CONTACT LIST

Agriculture

Organisation	Contact	Position	Location	Type of Contact
DAFF	Frank Macken	Agricultural Inspector	Department of Agriculture, Johnstown Castle, Wexford	Phone interview
Teagasc	Rogier Schulte	Head of Environmental Research	Teagasc HQ	Phone interview
Teagasc	Martin Henry	Chief Agricultural Officer Sligo / Leitrim	Riverside, Sligo	Interview
NFRB	Paul Byrne	Agri – environment project officer	NFRB, Ballyshannon	Interview
DARD	Patrick McGurn	Countryside Management Adviser	Inishkeen House, Enniskillen	Interview
DARD	Dr Harry Gracey	Director Countryside Management Division	Loughrey College, Cookstown	Interview
DARD	Alan Morrow	Countryside Management Division	Loughrey College, Cookstown	Interview

Forestry

Organisation	Contact	Position	Location	Type of Contact
Forest Service	Noel Foley	Divisional Inspector, Environmental Audit and Forest Protection	Department of Agriculture and Food Letterkenny	Interview
NRFB	David Laing	Forestry project officer	NRFB Ballyshannon	Interview
DARD Forest Service	Ian Irwin	Divisional Forest Officer	Inishkeen House, Enniskillen	Interview
DARD Forest Service	Stuart Morwood	Director – Policy and Operations	Dundonald House, Belfast	Phone call

Planning

Organisation	Contact	Position	Location	Type of Contact
Leitrim County Council Co	Ciaran Tracey	Senior Planning Officer	Carrick on Shannon	Interview
DoE Planning Service	Deirdre McSorley	Sub-Divisional Planning Officer	Sub-Divisional Planning Office, Enniskillen	Interview

Water Quality

Organisation	Contact	Position	Location	Type of Contact
Leitrim County Council	Brian Kenny	Senior Engineer – Environment	Carrick on Shannon	Interview
Leitrim County Council	Eileen Gibbons	Scientific Officer - Environment	Carrick on Shannon	Interview
EPA	Martin McGarrigle	Regional Manager – Castlebar Inspectorate	EPA Regional Inspectorate Castlebar	Interview
N S Share	Tony McNally	Project Co-ordinator	Letterkenny, co Donegal	Phone interview / questionnaire
DoE EHS	Angus McRobert	Team Leader, River Basin Planning	Water Management Unit, Lisburn	Interview
DoE EHS	Joanne Livingstone	NW RBD Catchment Officer	Water Management Unit, Lisburn	Email contact
AFBI	Bob Foy	Principal Scientific Officer	New Forge Lane, Belfast	Interview
NI Water	David Hilary	Head of Wastewater Capital Procurement (West & South)	Northland House, Belfast	Phone interview
EHS / FDC	Adrian Hurst	Erne/Melvin Catchment Officer	Townhall, Enniskillen	Interview

Fisheries

Organisation	Contact	Position	Location	Type of Contact
NRFB	Harry Lloyd	CEO	Ballyshannon	Interview
NRFB	Brendan Maguire	Senior Environmental Fisheries Officer	Ballyshannon	Interview
NRFB	Milton Matthews	Assistant CEO	Ballyshannon	Interview
DCAL	John Kane	Senior Fisheries Officer	Inishkeen House, Enniskillen	Interview
Garrison and Melvin Anglers Association	Malcolm Finney	Secretary	Enniskillen	Phone interview

Nature Conservation

Organisation	Contact	Position	Location	Type of Contact
NPWS	Dave Duggan	Deputy Regional manager	Glenveagh, Donegal	Interview
EHS Natural Heritage	Rosemary Bradley	PSO, Conservation Designation and Protection	Klondyke Building, Belfast	Interview
EHS Natural Heritage	Tony Waterman	Higher Scientific Officer, Biodiversity Unit	Klondyke Building, Belfast	Interview

Waste Management

Organisation	Contact	Position	Location	Type of Contact
EPA	Martin McGarrigle	Regional Manager, Castlebar Inspectorate	EPA Regional Inspectorate Castlebar	Interview (see Water Quality)
Leitrim County Council	Brian Kenny	Senior Engineer - Environment	Carrick on Shannon	Interview (see Water Quality)
Fermanagh District Council	Gerry Knox	Director, Technical Services	Townhall, Enniskillen	Interview
DoE EHS	Anne Blacker	Head of Land and Resource Management Unit	Klondyke Building, Belfast	Phone interview

Appendix IV - Votes per Issue from stakeholder workshop





