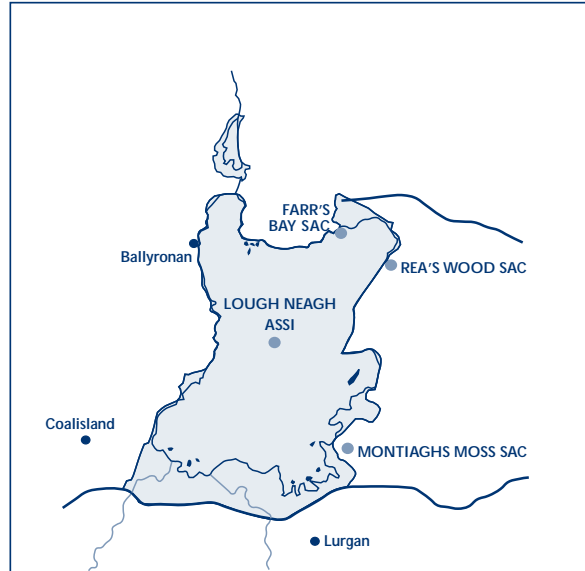


*Figure 8*

Lough Neagh and Lough Beg Ramsar Site (shaded in blue) and individual Special Areas of Conservation.



*Figure 9*

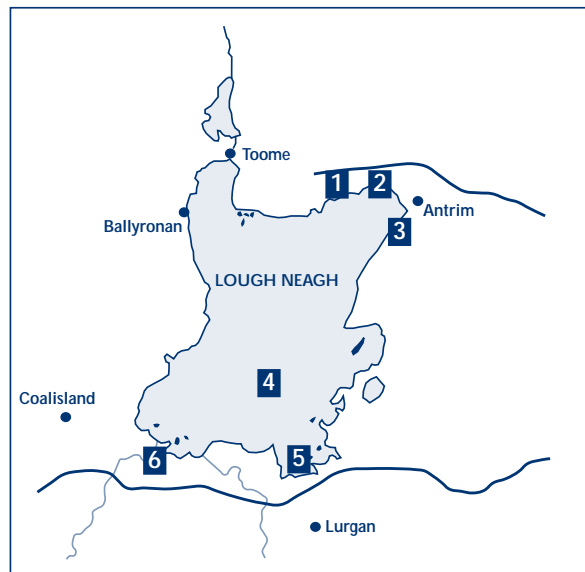
Lough Neagh and Lough Beg Special Protection Area (shaded in blue) and individual Areas of Special Scientific Interest.



*Figure 10*

National Nature Reserves in the Lough Neagh Wetlands.

1. Randalstown Forest (NNR)
2. Farr's Bay (NNR)
3. Rea's Wood (NNR)
4. Lough Neagh Islands (NNR)
5. Oxford Island (NNR)
6. Mullenakill and Annagarriff Woods (NNR).



**Special Areas of Conservation** are sites designated under the Habitats Directive for one or more of the habitats and species listed in the Directive. As for SPAs, SAC designation brings stronger protection measures to ASSIs. Montiaghs Moss, Farr's Bay and Rea's Wood are all candidate SACs. The SACs are shown in Figure 8.

**Areas of Special Scientific Interest** are examples of Northern Ireland's best sites in terms of wildlife habitats such as lakes, peat bogs or wet grasslands or because they have rare species. As most ASSIs are in private ownership EHS works in partnership with farmers and landowners to protect them from damaging activities. ASSIs in the LNW include Lough Neagh, Lough Beg, Portmore Lough, Culnafay, Toome, Peatlands Park and Montiaghs Moss. The ASSIs are shown in Figure 9.

**National Nature Reserves** are nationally important wildlife sites managed specifically to conserve the natural heritage and, where possible, provide opportunities for public access, education and research. There are NNRs at Lough Beg, Randalstown Forest, Rea's Wood, Oxford Island, Lough Neagh Islands, Mullenakill and Annagarriff Woods and Farr's Bay. The National Nature Reserves are shown in Figure 10.

**Sites of Local Nature Conservation Importance** (SLNCIs) are locally important sites identified in Area Plans with policies designed to conserve their wildlife interest from damaging development proposals. SLNCIs are being identified in the new round of Area Plans currently in preparation and EHS are currently involved in highlighting SLNCIs in the southern areas of Lough Neagh.

There are legal obligations both to maintain and enhance habitats in designated sites. Parts of the wider Ramsar Site are not underpinned by ASSI/SPA designation resulting in a lower level of statutory protection. The anomaly of having parts of the Ramsar Site without the legal protection provided by the ASSI designation has led to difficulties in protecting locally important sites in the wider Ramsar Site area from damaging developments.



### Conservation objectives

For each designated ASSI/SPA and SAC, EHS is going through a process of defining a list of features of interest and producing conservation objectives. The features of interest for the Lough Neagh, Lough Beg and Portmore Lough ASSI and SPA respectively are shown below. For the sake of brevity the features of the smaller satellite ASSIs and the SACs have not been listed here.

#### Features of interest for the Lough Neagh, Lough Beg and Portmore Lough ASSI

- Wet woodland
- Purple Moor-grass and rush pastures
- Reed beds and swamps
- Higher plant assemblage (rare and notable species)
- Invertebrate assemblage
- Breeding wildfowl and waders

#### Features of interest for the Lough Neagh, Lough Beg and Portmore Lough SPA

**Over-wintering birds** Whooper Swan, Bewick's Swan, Golden Plover, Great Crested Grebe, Pochard, Tufted Duck, Scaup, Goldeneye and waterfowl assemblage.

**Breeding birds** Common Tern.

**Migrating birds** Great Crested Grebe.

For each feature EHS will be identifying a number of conservation objectives. These conservation objectives will be systematically monitored in future to assess the condition of the ASSIs, SPA and SACs. Failure to meet conservation objectives will trigger a need for restorative action.

### **Northern Ireland Biodiversity Strategy**

The UK is committed to a Biodiversity Action Plan and the NI Government is currently considering proposals for a NI Biodiversity Strategy. A series of individual habitat and species action plans exist which are relevant to the Lough Neagh Wetlands. For example, UK action plans exist for the habitats listed below.

#### **Some priority habitats present in the Lough Neagh Wetlands**

- Wet woodlands.
- Ancient and/or species rich hedgerows.
- Lowland meadows.
- Fens.
- Reedbeds.
- Eutrophic standing waters.
- Coastal and floodplain grazing marshes.
- Lowland raised bog.

Recent monitoring has shown that the habitats associated with the Lough Neagh shoreline are under threat and have been locally degraded since the ASSI was first designated. In particular, the areas of wet woodland, scrub and drumlin woodland have reduced significantly. Fencing some of these areas to allow natural regeneration in association with native species planting would go far to extending these formerly extensive habitats in the LNW. The development and implementation of a Local Biodiversity Action Plan for the LNW would help identify priority areas, secure resources and generate action to conserve, enhance and restore important biodiversity features. The strength of the statutory, private, community and stakeholder partnership approach to implementing biodiversity actions cannot be underestimated. Local communities, farmers, local wildfowling clubs and interest groups with their expertise and extensive local knowledge can bring long term, practical commitment to biodiversity action.

### **Special management**

The NI Biodiversity Strategy lists a number of priority species which have UK action plans that occur in the LNW. The more significant of these are shown below. Some of these will receive adequate protection in the long term simply through habitat conservation. Others will need more specific action if their populations are to be conserved and enhanced. There is a potential conflict in that some protected and priority species such as otters and cormorants are natural predators for other priority species and economically important species such as salmon. Taking an ecosystem approach, a balance needs to be struck so that the protection of some species does not threaten the survival of others. Himalayan Balsam, giant hogweed and mink, for example, are already present. Care must be taken to prevent or at least postpone the introduction of additional non-native and invasive species. An example is the zebra mussel, which has not yet been found in the Lough Neagh system, but which has had a significant impact in the Erne system. In addition, non-native species such as the ruddy duck, which do not have a negative impact here, must be managed locally to safeguard native populations elsewhere in Europe. Local wildfowling clubs have a very detailed knowledge of the local surroundings and can be used to good effect to control relevant 'nuisance' species. A number of species are actively managed at present in the

LNW. Swans are possibly the most recognisable of the managed species. Swans feed where they think the feeding is best. This can vary year on year, but farmers are financially compensated for any management techniques employed to attract swans or for any agricultural land lost to swan grazing. Future compensation must be of an appropriate level to cover any loss of income from agriculture.

**Some NI priority species present in the Lough Neagh Wetlands**

- Pollan.
- Otter.
- Irish Lady's Tresses Orchid.
- Reed Bunting.
- Tree Sparrow.
- Narrow small-reed.
- Holy grass.
- Marsh Fritillary butterfly.
- Pennyroyal.

Objective 7		Reporting Agency		
To conserve, monitor, manage and where appropriate enhance and restore, important habitats and species in the Lough Neagh Wetlands.		EHS		
Indicative Actions	Reporting Agency	Partners	Timescale	
7a Prepare an integrated Local Biodiversity Action Plan for the LNW that takes into account designated nature conservation sites and priority habitats and species and identifies opportunities for enhancing and restoring important species numbers and damaged sites and reduces habitat fragmentation by extending and linking existing wetland habitats.	LNP	DARD EHS LA RAN LNAC RSPB LWC/I	2004	
7b Set up a biodiversity working group, with stakeholder representation, to provide strategic advice on biodiversity within the LNW.	LNAC	EHS RSBP RAN LA LNAC SH WWC RA	2003	
7c Employ a dedicated officer to promote and co-ordinate sustainable land management including the conservation, enhancement and restoration of important habitats and species.	LNP	EHS LA SH DARD WWC RA	2003	
7d Produce conservation objectives for the SPA, SAC and ASSI selection features to guide management priorities.	EHS	LNAC RSBP	2003	

Indicative Actions	Reporting Agency	Partners	Timescale
7e Identify SLNCIs for Area Plans and develop planning policies for the effective conservation and management of wetland and other priority habitats within the Ramsar site.	PS	EHS LA RAN	Ongoing
7f Carry out site condition assessments for the SPA, SACs and ASSIs and protect the SPA, SACs, ASSIs, SLNCIs and priority habitats from damaging activities.	EHS	PS LA	Ongoing
7g Deliver clear management advice to landowners in designated site or sites with priority habitats or species and encourage positive management and restoration work through incentive payments.	EHS	CMD RSPB SH LNP LWC/I RA	Ongoing
7h Review effectiveness of existing environmental designations, particularly the Ramsar Site, highlight potential improvements and identify and designate further sites within the LNW as ASSIs and SLNCIs.	EHS	LNAC LA PS RAN	2003
7i Produce biodiversity profile descriptions of Landscape Character Areas.	EHS		2003
7j Establish and manage LNRs with the multiple purpose of conserving and managing important wetland habitats whilst at the same time providing for well-managed public access and environmental education.	LA	EHS RAN LCG	Ongoing
7k Encourage the setting up of local management groups with statutory and stakeholder membership to protect, manage and promote nature conservation sites within the LNW.	LNP	LA EHS RAN LNAC LWC/I	2004
7l Research the impact of sand dredging operations on the Lough bed in full consultation with the industry and owners.	EHS	SE SELN	2004
7m Update, re-issue and continue to implement Government's policy on peatland conservation	EHS	PS DARD	2005
7n Raise awareness of important habitats and species in the LNW including the threats and management options through the production of appropriate and targeted media.	LNP	EHS LA	2004

Indicative Actions	Reporting Agency	Partners	Timescale
7o Monitor important species and develop and implement species recovery programmes.	EHS	LNP EHS RAN LA SH RSPB LWC/I RA	2004
7p Manage and review the network of Wildfowl Refuges.	EHS	SELN WWC LA RSBP	Ongoing
7q Monitor to establish if the illegal catching and selling of wildfowl is an issue and take action as necessary to stop the practice.	EHS	PSNI WWC	2003

Objective 8		Reporting Agency	
To prevent the introduction and, where possible, control the spread of invasive species in the LNWs		EHS	
Indicative Actions	Reporting Agency	Partners	Timescale
8a Carry out a review of the invasive species in the LNWs.	EHS	LA	2004
8b Develop measures to exclude and manage invasive species, particularly zebra mussels.	EHS	DARD WI DCAL LA WS	Ongoing
8c Control invasive species where they pose a threat to important biodiversity habitats or species.	EHS	LA DARD DCAL WI LWC/I	Ongoing
8d Raise awareness of the threat of invasive species in the LNWs and provide advice on their control through the use of appropriate and targeted media	LNP	EHS DCA	Ongoing

## LIFE, WORK and INFLUENCING CHANGE

**Aim: To ensure a vibrant, thriving, knowledgeable and appreciative local population that will act as future custodians of the Lough Neagh Wetlands.**

### INTRODUCTION

The people are the most important asset of the Lough Neagh Wetlands. They are diverse, but it is their actions that have sculpted the surrounding landscape over past centuries and it is they who bring life and vitality to the area through social interaction and social infrastructure. They live, work, relax, learn, educate and socialise in the



*Lough Neagh Pollan Fishers Preparing the Nets.*

Wetlands. The local people and stakeholders have a vital role in safeguarding and further developing the economic and social fabric whilst ensuring future environmental integrity.



### 3.1 People and Work

Whilst it is impossible to categorise the people living and associated with the Wetlands, the headings below have been chosen in an attempt to provide structure to this chapter.

#### Farmers and ancillary workers

The farming community, including horticulturists and peat extractors have a very visual impact on the land. They are mainly responsible for maintaining the landscape character and parts of the built environment. In Northern Ireland as a whole, farm units are being sub-divided for successive generations and as a result of becoming smaller are less able to support even one family unit. For this reason, many of the people from farming stock, especially young people, are exploring on-farm diversification or are choosing alternative occupations. Some of those seeking alternative employment are still choosing to live within the Wetlands, but others are leaving the area altogether. This demographic shift could have major implications on the overall landscape and character of the area in future years if there is a lack of people actually living on, and managing the land.

#### Fishermen and ancillary workers

Probably the next largest group of people in the Wetlands are the fishermen. In 2000, 185 licences were issued to fishermen concentrated mainly on the western and southern shores of Lough Neagh. It can be assumed that approximately 370 people are earning a part-time living from eel and scale fishing. Fishing licences tend to stay within family groups and therefore there has been a tendency for skills to be passed down to each successive generation. There has been a noticeable progressive decline in the number of Lough fishermen and in particular a noticeable shift of young people out of this occupation to more mainstream, full time

occupations. As long as stocks are managed sustainably, fishermen can look forward to earning a reasonable living during the season. The numerous fishing quays around the shores do have a physical impact and, if care is not taken, can have a negative visual and environmental impact on the local landscape.

**Other Local People**

Whilst it is hard to categorise individual people living in the Wetlands, the majority tend to have some connection to past social history and demographic changes. Family members involved in local businesses, such as boat building and sand extraction, have more than just an economic attachment to the area and successive generations tend to stay in the locality. There are many other indigenous people, including landowners, living and working in the Wetlands. There are also many people who live in the area, but who through choice or necessity have to leave the area for work. There are great opportunities for starting up small businesses, particularly in the local craft, recreation and knowledge-based sectors. Whilst the potential for diversification will be recognised in the local plans, there must be a balance between granting permission for new or change-of-use planning and between habitat conservation.

**Newcomers**

The indigenous people and culture, landscape character, environmental attributes and economic potential have attracted many people to the area. These people, locally known as ‘blow-ins’ can work in or outwith the area, but many have a high degree of enthusiasm for the area and are willing to enter into local community life.

Objective 9		Reporting Agency		
To retain a mixed, active, physically healthy and economically healthy local population in the Wetlands.		RAN		
Indicative Actions	Reporting Agency	Partners	Timescale	
9a Raise awareness and appreciation of the importance of agriculture for the rural economy and social structure of the Lough Neagh Wetlands.	LNP	DARD UFU NIAPA	Ongoing	
9b Improve physical conditions for fishermen at quays.	RAN	LCG LN Co-op	2006	
9c Carry out a study to highlight the potential for, and possible planning implication for, local indigenous, resource based, sustainable economic activity (crafts, heritage, well-managed recreation etc).	RAN	LCG INI PS	2003	
9d Increase opportunities and capacity in local population to develop and implement environmentally sustainable economically viable projects.	INI	RDD RAN	Ongoing	



**3.2 Social and Service Infrastructure**

**Services**

Whilst the people who live and work in the Wetlands appreciate that there will never be the same level of infrastructure that there is in an urban situation, they are prepared to work at



maintaining and enhancing the facilities available to them. Housing, local schools, youth facilities, health care, meeting places, child care, transport, shops, pubs, recreational opportunities etc. are all vital to maintaining a mixed age ratio and vibrant population. The new deprivation statistics show that some of the highest deprived areas west of the Bann are still found on the western shores of Lough Neagh but, in general, living conditions and opportunities have greatly improved over the last few years. There must be provision for improving the service infrastructure around the Wetlands and there must be opportunities for necessary developments within an overall developmental framework to further alleviate any disadvantage. There are many ways of sympathetically incorporating the necessary physical improvements, including new housing provision into the existing/traditional built and natural landscape. The majority of this service infrastructure is contained within individual area plans and it is therefore vital that local inhabitants and stakeholders know how to influence the local planning process. Statutory/residents/stakeholder partnerships should be set up to ensure that local people can and have a meaningful input into all processes that impact on their area.



*Basket Weaving  
on the Shores  
of Lough Neagh.*

**Cultures**

The past and recent history of the area and character of the local people has resulted in a wealth of cultural artefacts and past and living traditions, including music, dance, storytelling and dialect, that are being passed down to future generations. It is vital that this activity and information is valued, celebrated and recorded. Although social, environmental and economic activity celebrating local traditional cultures appears to be stronger on the western and southern shores, this needs to be further supported in these areas and encouraged on the other shores. Learning about, appreciating and celebrating local traditional cultures and traditions, networking and sharing recreational time together can help local people to bond and become custodians of the Wetlands.

**Recreation**

There have always been opportunities for recreation and relaxation within the area, but in the past few years, local authorities, in particular, have put great effort into improving and extending infrastructure, including walking and cycling routes, new play areas, bird hides etc. As well as the infrastructure, there are many group activities, socialising networks and organised events encouraging people to live a healthier lifestyle, while at the same time raising awareness of the particular attributes of their local surroundings. The physical needs relating to recreation are considered in the recreation chapter.

Objective 10	Reporting Agency		
To maintain and enhance local services, cultural and social activities, recreational opportunities and people's desire to act as custodians within the Wetlands.	RAN		
Indicative Actions	Reporting Agency	Partners	Timescale
10a Carry out a survey of local service provision and highlight needs throughout the Wetlands.	RAN	RCN	
10b Produce a database of local cultural traditions, sites, townland names, values etc.	RAN	LCG	2005
10c Raise awareness of local cultures and traditions and environmental diversity of the Wetlands through facilitating celebrations and using appropriate and targeted media.	RAN	LCG LNP	Ongoing



### 3.3 Influencing Change

The most effective way to ensure that the social, economic and environmental infrastructure of the Wetlands is enhanced and perpetuated is to work in partnership.

#### Community/Interest Groups

There are many excellent community and interest groups operating in the Wetlands area. Each group may have slightly different aims and objectives, but a common theme is improving conditions and opportunities for local people. Examples include fishermen who have worked together to improve facilities at quays, farmers who are visioning agriculture post FMD, young people celebrating local art, heritage and birdlife, cultural groups promoting specific locations and activities and environmentally focused groups raising awareness. It is appreciated that community and interest groups are more developed in particular areas of the Wetlands and care must be taken to ensure that one group does not become dominant to the detriment of other groups. The Rural Area Networks encourage new self-help groups to form and provide technical support. Community representation on partnerships is often provided through the Networks.

#### Partnerships

Whilst there are particular interest groups, there is a need for additional partnerships where local community representatives and stakeholders can work with the statutory agencies on specific issues and influence future policy. The involvement of local people and stakeholders in the decision making process cannot be over-stressed. The future integrity of the Wetlands is dependent on a knowledgeable, appreciative and active local community keeping a watchful eye on their own area and liaising with the statutory agencies on issues relating to water pollution, archaeological finds etc. For this reason, there must be representation from local people in all action and management bodies, incorporating the bottom-up meeting top-down approach.

Objective 11		Reporting Agency		
To ensure that members of the local community and stakeholders have a meaningful say in the management and development of their local area.		RAN		
Indicative Actions	Reporting Agency	Partners	Timescale	
11a Facilitate and support local community and special interest groups.	RAN		Ongoing	
11b Ensure representation from local community and stakeholder groups on local management and action bodies.	RAN	LNAC LNP	Ongoing	
11c Set up local community countryside/heritage partnerships to inform the planning process and assist local people in acquainting themselves with the planning process.	LNP	LNAC RAN LCG LWC/I	2006	
11d Set up a sub group to steer sustainable development of the angling product that does negatively impact on local habitats or other legitimate activities.	LNP	UAF UCFF FO LN/LBAC	2003	
11e Set up a working group to steer marketing of the Lough Neagh product.	LNP	LNAC LBAC RTO NITB SH	2003	
11f Set up 3 inclusive river/catchment monitoring groups and encourage information flow.	LNAC	EHS RAN SH	2004	
11g Raise awareness and inform people of local management issues relating to the Wetlands using appropriate and targeted media.	RAN	LNAC LNP SH	Ongoing	



### 3.4 Education and Awareness

#### Knowledge and Appreciation

In order for people to value, respect and influence the management and sustainable development of their area it is important they have a degree of knowledge and appreciation of environmental, economic and social factors. To date, wide knowledge and appreciation of the Wetlands has been confined to a relatively small number of people. This is regrettable given the present internationally renowned resource and the future potential that exists. There are numerous opportunities to educate local people and visitors at facilities such as the Lough Neagh Discovery Centre, Peatlands Park and Portmore Lough. There is also a great opportunity



*Local children learning about eels at the Lough Neagh Discovery Centre*

to create a Wetlands identity and to encourage local people to take on the mantle of 'ownership' and be custodians of the area. The enormity of a comprehensive education and awareness raising programme is appreciated, but the benefits would be significant and widespread and could even reduce the need for widespread planning enforcement procedures. Several organisations and local authorities are doing excellent work to raise awareness of the area and create a 'sense of local ownership', but at present there is no single co-ordinating framework to oversee the task. Whilst raising awareness must be targeted at relevant audiences, there must also be a wide research programme to inform the future strategic management process.

Objective 12		Reporting Agency		
To raise awareness, appreciation and a desire to act as custodians of the Wetlands in local people and in people throughout the catchment.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
12a Set up a strategic education and awareness work group, with stakeholder representation, as a sub group of the overall management body.	LNP	LNAC RAN SH WWC DED DEL	2004	
12b Review existing provision for education and interpretation opportunities, highlight gaps and prepare an educational programme for target audiences.	LNP	LNCC LNAC SH	2004	
12c Prioritisation and production of educational information in line with available resources and appropriate media, including the setting up of a Lough Neagh web-site.	LNP	LNAC LNCC SH	2004	
12d Highlight subject areas and encourage research projects.	LNAC	LNP UNI FHE	Ongoing	
12e Develop an accessible, compatible and integrated GIS to manage data handling as a management and educational tool.	LNP	LNAC EHS LA RAN	2005	
12f Compile and promote a calendar of Wetlands focused activities. Consider disturbance/zoning/activity - SUSTAINABILITY APP	LNP	LNAC SH LA	Annually	
12g Encourage local area management groups to develop local educational projects that encourage a desire to act as custodians.	RAN	LNAC LNP LWC/I	Ongoing	
12h Ensure representation from local community and stakeholder groups on local advice, management and action bodies.	RAN	LNAC LNP	Ongoing	

## LANDSCAPE

**Aim: To maintain and enhance the characteristic landscape features of the Wetlands' whilst ensuring environmental, economic and social sustainability.**

### INTRODUCTION

#### Landscape Character

The landscape of the Lough Neagh Wetlands is a culmination of millions of years of rock formation, alteration and erosion. Moulded by ice and rivers, the underlying strata are covered by water and/or vegetation that have been continually changed. People are by far the most recent influence and they have had a great impact on the visual appearance of the Wetlands through their drainage activities, farming practices, peat extraction and settlement patterns. Human impacts can be seen in the rich wetland archaeology, only a fraction of which has been uncovered to date. Parts of the low-lying Lough margins are densely settled at present, with lines of houses edging the straight or looping roads, but there are other areas of uninhabited marsh and woodland, peatland, wet meadows, reedbeds, woodlands and scrub, with pastures and settlements on adjacent higher ground.

#### Landscape Designations

Much of the shoreline of Lough Neagh has some form of landscape quality designation. It is termed the 'Lough Neagh Fringe' in the Landscape Character Assessment. The draft Dungannon & South Tyrone and Cookstown Area Plans term the shore a 'Landscape Policy Area' and suggest that there is a need to respect and protect the natural and man-made environment of this area because it is considered to be of great amenity value, landscape quality and has local significance.

#### Regional Development Strategy for Northern Ireland 2025

The Regional Development Strategy for Northern Ireland (RDS) was formulated in September 2001. It sets out a spatial framework to guide development over the next 25 years. It is not limited to land use planning but recognises that policies for physical development have an important bearing on other matters such as developing a strong mixed use rural economy, whilst protecting the natural character of lakes, waterways and landscapes. Lough Neagh is specifically mentioned in terms of the quality of the landscape, environment and potential for water based activity. The RDS contains a Spatial Development Strategy and Strategic Planning Guidelines (SPGs) for key subjects. Whilst many of the SPGs highlighted for the whole of Northern Ireland are relevant in the Lough Neagh Wetlands, the guidelines on the Environment, Economy and Rural Northern Ireland are particularly relevant. The table below shows the direct linkages between the SPGs of the RDS and the, more area specific, objectives in the LNMS.

RDS SPG	LNMS Objective
SPG-ENV 1 To conserve the natural environment.	Objective 7 To conserve, monitor, manage and where appropriate enhance and restore the important habitats and species in the Lough Neagh Wetlands.

SPG-ENV 3.2 Safeguard buildings of special architectural or historical interest.	Objective 13 Ensure that all locally distinctive buildings and features are retained in the Wetlands and continue to contribute to the overall landscape quality.
SPG -RNI 2 Help maintain a vibrant and self-generating rural community.	Objective 10 To maintain and enhance local services, cultural and social activities, recreational opportunities and people's desire to act as custodians within the Wetlands.
SPG-ECON 9.2 Protect and enhance water based visitor amenities.	Objective 21 To provide well-managed and serviced water access points and activities within the Lough Neagh system.

**Northern Ireland Landscape Character Assessment 2000**

In 2000 Northern Ireland was surveyed to inform land-use planning, land management and environmental conservation and enhancement at both regional and local level. One hundred and thirty landscape character areas were identified province wide. Six of the distinct landscape areas highlighted have been termed the Lough Neagh Wetlands. These are shown in Figure 2 on page 12. The main concerns relating to the Lough Neagh Wetlands are built heritage, blending existing buildings, integrating new buildings and maintaining field and boundary patterns.



**4.1 Built Heritage**

**Background Information**

The present landscape of the Lough Neagh Wetlands shows the effect of human presence and activity with its rich variety of archaeological sites and monuments, historic and vernacular buildings and industrial heritage features etc. Whilst change is inevitable, it is important to appreciate, respect and protect the built heritage. Due consideration must also be given to protecting, conserving and valuing the settings and landscape within which built features are found. This will ensure a rich historic legacy and attractive landscape for future generations.

**Statutory Protection**

At present there is statutory protection for scheduled monuments and listed buildings. There are other 'built' features worthy of maintaining in the landscape that are locally distinctive or are enshrined in folklore etc, but currently for these there is no form of statutory protection. Although there are planning policy statements or guidelines for planning, archaeology and the built heritage, many built and landscape features are being destroyed, neglected or ignored. The restrictions on financial maintenance assistance for non-listed buildings and non-scheduled monuments, and the high demand for private dwelling building sites and replacement dwellings exacerbates this problem. There is also a need for adequate and appropriate planning controls to prevent over development of the countryside. Local awareness and appreciation is crucial to the retention of vernacular structures and their settings.

Objective 13		Reporting Agency		
Ensure that all locally distinctive buildings, archaeological sites and features are retained in the Wetlands and continue to contribute to the overall landscape quality.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
13a Implement landscape planning policies contained within PPS6 Planning, Archaeology and the Built Heritage.	PS	EHS	Ongoing	
13b Produce and review a database of all listed buildings, scheduled monuments, non-listed traditional buildings and non-scheduled Historic Monuments in the Wetlands area.	EHS	RAN LCG	2005	
13c Explore the provision of additional resources to facilitate consolidation and retention of non-listed buildings, archaeological sites and features in the landscape.	EHS		2004	
13d Raise awareness and appreciation of the importance of retaining and reintroducing local traditional buildings, individual features and field and boundary patterns and the impact of and screening methods for 'out of character' buildings in the landscape of the Wetlands using appropriate and targeted methods.	LNP	EHS LNAC	Ongoing	



## 4.2 Blending Existing Buildings

### Background Information

In the recent past, finance has been the main underlying consideration when designing and constructing new buildings. This policy has resulted in many 'out of character' buildings being erected within the Wetlands. These buildings do not blend with or complement the vernacular style and can detract from the overall landscape quality. The proximity of the Lough shores distinctive character area to main transport routes has also resulted in the building of commercial and distribution units that do not blend with local vernacular style. It is acknowledged that inappropriate building should not be allowed in the Wetlands, but action could be taken to ensure that the worst, already constructed, examples of private and commercial buildings are made to blend with, or be hidden within, the landscape.

Objective 14		Reporting Agency		
To ensure that existing 'out of character' buildings blend with the Wetlands landscape.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
14a Promote the screening of existing 'out of character' building (with native species) within the Wetlands landscape and from water.	LNP	LNAC EHS	Ongoing	



Indicative Actions	Reporting Agency	Partners	Timescale
14b Raise awareness and appreciation of the importance of retaining and reintroducing local traditional buildings, individual features and field and boundary patterns and the impact of and screening methods for 'out of character' buildings in the landscape of the Wetlands using appropriate and targeted methods.	LNP	EHS LNAC	Ongoing



### 4.3 Integration of New Buildings

#### Background Information

The landscape character of the Wetlands has been degraded particularly because of the recent demand for private dwellings and because it is within the Belfast Travel to Work area. Often these dwellings are built in soggy areas, which have sometimes been in-filled before planning permission is even sought. The granting of planning permission in wet fields, cut-over bogs or between a road and the Lough is contrary to the 'Wise Use of Wetlands' principle which governs both this Strategy and the Ramsar Convention, and which the Government is committed to uphold. A strong Planning Policy is therefore required which will enable sensitive, sensible serious assessment before planning permission is granted for dwellings in such areas, both for landscape and biodiversity reasons. Housing styles have changed considerably all over Northern Ireland with the resultant dilution of vernacular style. In general new buildings, including private dwellings, commercial properties and utility provisions, in the Wetlands area are not visually integrated into the landscape and are not clustered around existing infrastructure. It could be advantageous if the developers of strategic or major Lough Neagh developments were advised to consult with the LNAC/Lough Neagh Partnership.

Objective 15	Reporting Agency		
To ensure that all new buildings/developments are sympathetically designed and appropriately sited and managed to maintain the traditional and special Wetlands landscape character.	PS		
Indicative Actions	Reporting Agency	Partners	Timescale
15a Prepare and implement an all encompassing separate area or subject plan for the Lough Neagh Wetlands including appropriate details from Planning Policy Statements.	PS	ALL	2008
15b Produce and implement a planning policy that will prevent loss or damage to key landscape features and habitats through inappropriate development.	PS		
15c Set up local community countryside/heritage partnerships to inform the planning process and assist local people in acquainting themselves with the planning process.	LNP	LNAC RAN LCG	2006



Indicative Actions	Reporting Agency	Partners	Timescale
15d Produce environmental impact assessment, using the precautionary principle, for all appropriate new developments.	PS	EHS SH	Ongoing
15e Ensure that existing and any new appropriately located recreation sites, access points and other developments have an adequate management structure that considers environmental and economic aspects, respects other user groups and produces and implements site management plans.	LNP	LNAC EHS SH LA PS	Ongoing
15f Implement strict enforcement procedures especially on in-filled wetland areas.	PS	EHS	Ongoing
15g Raise awareness and appreciation of the importance of retaining and reintroducing local traditional buildings, individual features and field and boundary patterns and the impact of and screening methods for 'out of character' buildings in the landscape of the Wetlands using appropriate and targeted methods.	LNP	EHS LNAC	Ongoing



#### 4.4 Field and Boundary Patterns

##### Background Information

Hedgerows, walls, gates, ditches, banks and the raised, narrow, straight, rampart road patterns all contribute greatly to the overall character of the wetland area and improve local biodiversity. Individual features in the rural landscape can be part of local folklore and can contribute to local culture. Such features can include a single thorn bush in the middle of a field or individual stepping-stones in a stream. In recent years, hedgerows, hedgebanks and gates have been removed to facilitate agriculture and transport. The general decline in hedge maintenance can often be related to the state of the local rural economy. A healthy built and natural landscape is vital to the maintenance and development of a vibrant economy, local community and local culture. The restoration or building of new field boundaries should be managed appropriately to ensure 'fit' with existing landscape patterns, boundary styles and material composition.

Objective 16	Reporting Agency		
To maintain and appropriately enhance traditional field and boundary patterns and individual features which contribute to overall landscape character of the Wetlands.	LNP		
Indicative Actions	Reporting Agency	Partners	Timescale
16a Minimise habitat destruction and reinstate appropriate landscape features after developments such as road realignment/widening schemes.	RS	SH	Ongoing

Indicative Actions	Reporting Agency	Partners	Timescale
16b Promote local uptake of the Countryside Management Scheme or similar scheme, particularly with reference to appropriate boundary features.	CMD	UFU NIAPA RAN	Ongoing
16c Produce and implement a planning policy that will prevent loss or damage to key landscape features and habitats through inappropriate development.	PS	EHS	2008
16d Produce a database of boundary patterns and features within the Wetlands and monitor maintenance, destruction and enhancement.	LNP	RAN LNAC LCG	2006
16e Set up local community countryside/heritage partnerships to inform the planning process and assist local people in acquainting themselves with the planning process.	LNAC	LNP RAN LCG WWC	2006
16f Raise awareness and appreciation of the importance of retaining and reintroducing local traditional buildings, individual features and field and boundary patterns and the impact of and screening methods for 'out of character' buildings in the landscape of the Wetlands using appropriate and targeted methods.	LNAC	EHS LNP	Ongoing

## AGRICULTURE, MINERALS and FISH

**Aim:** To ensure the sustainable use of land, minerals and fish in the Lough Neagh Wetlands giving recognition to environmental, economic and social needs.

### 5.1 Agriculture

#### INTRODUCTION

Farming is the major land use in the Lough Neagh catchment and hinterland. Whilst traditional agriculture has been responsible for sculpting much of the familiar landscape of the Wetlands, modern farming or land management techniques can have major impacts on the general appearance of the landscape, environmental quality and the local economy. The Foot and Mouth Disease outbreak in 2001 highlighted the strong and vital links between agriculture and many aspects of rural life including tourism, recreation and the health of the local economy. Agriculture should therefore be seen as a cross cutting theme. For this reason, many of the recommendations for farmers and stakeholders in relation to agriculture are mentioned in other issue chapters, particularly Chapter 1 - WATER, but other factors, which have been highlighted as pertinent to the Lough Neagh Wetlands, are discussed below.



#### Land and Farming Type

In Northern Ireland, 78% of the land under agricultural production is in grassland and 70% of land is classified as a Less Favoured Area (LFA). Whilst these figures provide a background to the type of land and farming which forms the base for the agricultural industry in NI as a whole, they can also be considered as representative of the Lough Neagh Wetlands, where the land is mainly farmed grassland supporting cattle with a few horticultural businesses concentrated on the southern shores.

The land around the Lough can be defined as follows

1. West & northeast shores - dry low-lying (some deciduous woodland)
2. North east and eastern shores - good quality farmland, more intensive production, especially dairying
3. South and south east shores - wetland, with grazing, horticulture and fruit production.



#### Economically Viable Agricultural Units & Rural Population Retention

Agricultural incomes have fallen dramatically in the last few years and a considerable proportion of farm subsidies are required to maintain financial viability. Farmers are very tied and faithful to their land and wish to be able to hand the farm unit to the next generation. Some farmers have had to take part or full time work off the land to help maintain income and cashflow. If farmers are to consider alternative uses or management techniques for their land, as opposed to intense commodity production, they must be recompensed for the work carried out to deliver environmental or social benefit. Alternatively, in completing on-farm work, they must be increasing the potential of their farm to generate an additional income through diversification. The average age of farmers has been increasing NI wide and there are concerns about the lack of young people wishing to take on the family farm. These facts are somewhat

substantiated by the increasing amounts of land in conacre. This has far reaching implications for the maintenance of the rural agricultural population, social structure and general landscape characteristics.

### **Environmental Integrity of the Wetlands**

Emphasis is changing from commodity production to sustainable land management for habitat and species diversity, recreational opportunity and landscape character. DARD, Countryside Management Division provides advice on land management in various publications including 'Good Farming Practice'. There is and should continue to be movement away from compensation payment for not destroying habitat to payments for positive sustainable land management measures and habitat creation. Grants are being made available to assist willing farmers to change their management practices, including the Countryside Management Scheme and rural development and diversification grants. In many cases, farmers are not aware and do not have the necessary knowledge or capacity to access and deliver these schemes, or their farm does not meet the specific entry/qualification requirements. It should also be noted that many farmers are prevented from availing of grant assistance because slurry and silage facilities are below scheme entry requirements and they do not have the necessary profit margin to allow for re-investment in such structures. It is appreciated that farmers with financially viable commodity producing businesses, who are meeting their environmental obligations, may not wish to alter their current land management practices. It would be beneficial to have a fully functioning, economically viable, farm unit within the Wetlands, which is managed using best practice and which incorporates elements of diversification, that could act as an example for other local farmers.



### **Water Quality**

The waters of Lough Neagh are very rich in the nutrient phosphorus that leads to excessive algal growth, in turn reduced water transparency and disrupting the ecological balance. In 2000, 61% of the phosphorus coming into Lough Neagh via the rivers of the catchment, came from agricultural sources. Phosphorus is present in fertilisers and slurry which are spread on land and can eventually end up in watercourses through run off and leaching. The impact of farmers spreading slurry in the upper reaches of the Blackwater catchment can manifest itself negatively in Lough Neagh. DARD provides advice to farmers on fertiliser application and it has plans to introduce nutrient management planning within the Lough Neagh catchment. The LNAC would like to see nutrient management planning introduced as soon as possible.



### **Water Levels**

The level of the water in Lough Neagh is managed by a series of sluice gates. Increased land and river drainage schemes have resulted in water draining from the catchment more quickly. As described in the water levels section, the capacity of the Lower Bann River to drain Lough Neagh is limited and, as such, water levels in Lough Neagh can rise during periods of sustained high rainfall. This is more visible in the low-lying southern wetlands that flood in wet winter and spring months. In order to maximise agricultural productivity, farmers would like water levels managed to allow them to gain access to fields as early as possible in the growing season. Falling floodwaters can leave behind oil residues that are detrimental to new grass growth and contaminate vegetable crops. High river flow and scouring can wash inter-field fences away. A full consultation exercise would have to take place with farmers and other stakeholders before any change in management of water levels could take place.

**Recreational Access**



Farmers and major land owners are concerned about the implications of allowing public access to their land. At present EHS are carrying out a review of the laws on occupiers' liability in relation to recreational access on private land. Changes to legislation may be considered. Particular interest groups such as conservationists and wildfowling groups also have concerns about the potential increase in public access that could lead to habitat disturbance. Local wildfowling groups have access agreements with landowners and have their own liability insurance.



**Fallen/Dropped Animals**

In the past a significant number of animal carcasses have been noted in the watercourses of the catchment and on the shores of Lough Neagh. In a number of cases, ear tags have been removed to prevent owner identification. The carcasses can get into the water as the result of an accident, negligent management techniques or by deliberate farmer action. They can be a hazard to human health and navigating craft. Legislation to prevent disposal using this method has been introduced recently. It is anticipated that the new system will reduce the problem of fallen animals in watercourses.



**Environmental Impact Assessments**

Under the EC Environmental Impact Directive (85/337/EEC as amended by 97/11/EC), there is now a requirement for the preparation of Environmental Impact Assessments when changing the use of previously uncultivated/semi-natural land. Farmers are concerned about the level of EIA needed for particular operations and land types and the obvious financial and practical implications of implementing any future legislation.

Objective 17		Reporting Agency		
To maintain and enhance the economic potential of farm units within the Wetlands, whilst maintaining and enhancing the environmental quality, social infrastructure and recreational potential.		DARD		
Indicative Actions	Reporting Agency	Partners	Timescale	
17a Produce a baseline study of agriculture and horticulture in the Wetlands including information on land type, management activities, unit size etc.	DARD	UNI/FHEC UFU NIAPA	2004	
17b Carry out a review into the entry requirements/ standards to the Countryside Management Scheme for landowners within the Wetlands and amend/tailor as necessary.	DARD	UFU NIAPA RAN	2004	
17c Employ an officer to promote sustainable land management including the protection, enhancement and restoration of important habitats and species.	LNP	DARD EHS LA WWC SH	2003	

Indicative Actions	Reporting Agency	Partners	Timescale
17d Establish a fully functioning, economically viable farm unit within the Wetlands, to act as an example for other local farmers and which is managed using best practice and which incorporates elements of conservation and diversification.	RAN	LNP EHS DARD	
17e Implement and monitor effectiveness of the new regulations relating to the disposal of dead farm animals.	DARD	UFU NIAPA IF LA	2004
17f Consider occupiers' liability concerns relating to countryside access and suggest changes to the legislation.	DOE	UFU NIAPA CAAN	Ongoing
17g Raise awareness of good farming practice and opportunities for diversification with farmers using appropriate media.	DARD	UFU NIAPA LNP	Ongoing
17h To raise awareness and appreciation of the importance of agriculture for the rural economy and social structure of the Lough Neagh Wetlands.	LNP	DARD UFU NIAPA IF	Ongoing

Objective 1	Reporting Agency		
<b>Implement the Water Framework Directive to achieve 'good status' within the timescales set out by the Directive including preparation and implementation of a Lough Neagh River Basin Management Plan.</b>	<b>EHS</b>		
Indicative Actions	Reporting Agency	Partners	Timescale
1a To reduce the input of phosphorus from major sources to the Lough Neagh catchment through publication and implementation of the NI Eutrophication Strategy.	EHS	GD/A LA NGOs SH ROI	To be set by WMU
1b Continue water quality monitoring programme within the catchment.	EHS	DARD	Ongoing
1c Encourage good farming/agricultural practice in relation to minimising phosphorus leaching and run off from the rural environment and encourage uptake of the CMS through possible creation of a new post.	DARD	UFU NIAPA LNP	Ongoing

Indicative Actions	Reporting Agency	Partners	Timescale
1d Review procedures for assessing applications for discharge consent to ensure that unsuitable sites are not consented, and ensure effective septic tank installation and management within the catchment and hold an up to date septic tank database.	EHS	PS	Ongoing
1e Carry out research into the most effective recovery and phosphorus reduction methods in Lough Neagh.	UNI	FHE	2004
1f Implement at least one nutrient management plan initiative, including soil sampling, in a priority sub-catchment of Lough Neagh with a long term goal of having compulsory nutrient management planning in the whole catchment.	DARD	EHS UFU NIAPA LNP RAN	2005
1g Raise awareness of the causes of a eutrophic system, the environmental implications, the consequences for users and methods of prevention using appropriate and targeted media.	LNAC	LNP DARD EHS	Ongoing
1h Implement the water quality recommendations contained within the NI & UK Biodiversity Strategies and the NI River Conservation Strategy.	EHS	DARD	Ongoing
1i Implement the 'Policy and Practice for the Protection of Groundwater in Northern Ireland' including investigation of the role of groundwater with respect to quality and quantity inputs into the surface water system.	EHS	GSNI DARD GSI	Ongoing
1j Carry out a review into the entry requirements/ standards to the CMS for landowners within the Wetlands and amend/tailor as necessary.	DARD	UFU NIAPA RAN	ASAP
1k Implement the relevant recommendations of the Culture Arts & Leisure Committee report on Inland Fisheries.	DCAL	FCB UAF UCFF	Ongoing
1l Operate a Lough Neagh catchment water quality monitoring group as a sub group of the Lough Neagh Advisory Committee.	LNAC	RAN SH EHS LWC	Ongoing
1m Set up 3 inclusive river/catchment monitoring groups and encourage information flow.	RAN	EHS LNAC LCG	2004

Objective 5		Reporting Agency		
To ensure that water quantity is managed within the provision of the WFD to provide optimum conditions for the natural environment, economy, preservation of the archaeology and other stakeholders.		EHS		
Indicative Actions	Reporting Agency	Partners	Timescale	
5a Carry out water balance and assessment of ecological needs of water bodies within the Lough Neagh Catchment to meet WFD.	EHS	DARD WS PWA	As per WFD	
5b Review operation of water level management within the provision of the WFD to provide optimum conditions for the environment, economy and stakeholders.	DARD	LNAC SH	2006	
5c Raise awareness of the importance and complex nature of water levels in targeted audiences using appropriate media.	DARD	LNP LNAC	Ongoing	

## 5.2 Minerals



### Sand

Approximately 1 million tonnes of sand, 15-20% of the Northern Ireland total, are extracted from the Lough annually. The sand industry employs significant numbers of local people and contributes to the local economy. There is no definitive research on the effects on the surrounding ecosystem or potential longevity of extraction, but it is recognised that Lough Neagh sand deposits are finite and that complete depletion of the resource could have economic, environmental and recreational safety consequences. In order to safeguard the future of the local economy and environment, research should be initiated, in complete consultation with the Northern Ireland wide industry and the owners of the mineral rights.



### Lignite and Natural Gas

Lignite or brown coal is a low-grade coal with a calorific value of about 60% of hard coal. It is also of international importance for its associated fossil deposits and can be a significant store of information. Substantial deposits of lignite have been identified around Lough Neagh, particularly at Crumlin and Ardboe, although it is likely that others exist. At present, the estimated reserves of lignite in Northern Ireland are over 1,000 million tonnes, which if mined economically could generate all the region's electricity, at current levels of demand, for over 100 years. Recent applications for prospecting licences relating to lignite were withdrawn due to the high level of opposition from local people and stakeholder groups. Several explorations for natural gas have also taken place in the Lough Neagh basin. There would be major environmental, social and economic consequences of developing these resources and therefore any proposal should be subjected to a rigorous sustainability assessment.



### Peat

Many of the rich peatland areas in the south of the Lough have been damaged due to drainage and peat cutting for fuel and horticulture. The mechanical extraction results in large areas



being harvested, in a single operation. This is an unsustainable use of the resource. However, there are significant short term economic benefits for the population including job creation and increased spend in the locality. Government policy states that peatland areas that have any conservation interest should be retained and enhanced, and therefore only bogs that have already been irreparably damaged should be used for other purposes. Northern Ireland peatlands are very important on an international scale and should be protected and valued accordingly.



**Diatomite**

The diatomite around Lough Neagh and along the Bann Valley is of international importance for geological, biological and archaeological reasons. It has been extracted for over a century and was used as an abrasive, as an inert filler, in brick making and as an absorbent for explosives. Geological Areas of Special Scientific Interest have been designated at Toome and Newferry. There are also significant deposits at Lough Beg, especially Ballymacombs More, but further research is needed to identify more fully the extent of remaining diatomite and associated deposits. The importance of the inter-relationship between diatomite and other related sediments e.g. peats, sands, gravels etc. together with archaeological materials, should be recognised.

Objective 18		Reporting Agency		
<b>To maintain a viable local economy whilst protecting and enhancing the archaeological interest, landscape and biodiversity of the Lough Neagh Wetlands.</b>		EHS		
Indicative Actions	Reporting Agency	Partners	Timescale	
18a Research the impact of sand dredging operations on the Lough bed in full consultation with the industry and owners.	EHS	SE SELN	2007	
18b Assess the sustainability of any proposal to extract lignite or natural gas.	DRD	LCG RAN LNAC	As necessary	
18c Update, re-issue and continue to implement Government's policy on peatland conservation.	EHS	PS SH	2004	
18d Liaise with peat extraction companies in the environmental, economic or recreational development of post extraction bog restoration programmes.	LNP	EHS PS RAN LNAC	As necessary	
18e Identify more fully the extent of remaining significant diatomite and associated deposits.	EHS		2005	
18f Raise awareness and appreciation of the mineral resources of Lough Neagh and the consequences of unsustainable management through appropriate and targeted media.	EHS	LNAC LNP RAN	Ongoing	

### 5.3 Fish



#### Background

The Lough Neagh system, including the open Lough, inflow rivers and tributaries and the Lower Bann, provides a valuable habitat for many species of fish including trout, salmon, eels, pollan, perch, pike, roach and bream. Whilst the other fish are native species, roach and perch are introduced. Roach have no commercial value after removal, but attract course anglers, whilst perch are exported to the continent. The Dollaghan is a brown trout variant which is thought to be unique to the system. The Lough still supports the largest population of pollan in Ireland and Europe. Pollan is an important fish in conservation terms. The fish feed on the abundant supply of food including the millions of Lough Neagh flies and their bloodworm larvae. The flies, which can not bite, can be a nuisance to the local population in late spring, but are vital to the Lough Neagh food chain. The large numbers of flies are a consequence of the eutrophic state of the Lough and therefore may reduce when the phosphorus concentration in the Lough reduces.



#### Commercial Fishing

The Lough Neagh Fishermen's Co-op Society Limited (Co-op) controls catching and marketing of eel and scale fish on Lough Neagh. The industry is a major local employer with significant international exports and an annual turnover in the region of £5.5million. Whilst pollan are caught on a commercial basis, the eel is by far the largest element of the industry. Five hundred and fifty tons of Brown eels, caught by local fishermen, and 150 tons of Silver eels caught at the eel weirs at Toome and Portna on the Lower Bann, are exported each year (based on 2000 figures from the LNCo-op). One hundred and fifty tons of silver eels are caught at eel weirs at Toome and Portna on the Lower Bann and are exported. Whilst commercial fishing licences must be obtained from the Fisheries Conservancy Board (FCB), the Co-op currently issues about 185 eel fishing permits. Fishermen operate out of small quays mainly situated on the western and southern shores. The Rivers Agency maintains the majority of deepwater access channels to these fishing quays and recently, several public quays have been upgraded for recreational and commercial fishing use. Fish are being caught illegally within the system and the FCB and fishery owners are operating to combat this problem. Where fish are caught outside the existing licence and permit system and the perpetrator of the crime is caught, the fish and associated equipment can be destroyed or disposed of in accordance with any instruction or authorisation from the FCB or the legal system.



#### Fish Populations

Maintenance and enhancement of all fish stocks are vital to the local economy. Present eel population dynamics are not fully appreciated. More information is needed on the population dynamics of salmonid and cyprinid species that are the basis of the rurally important angling economy.

Many of the following recommendations are also relevant to the angling section contained within the Recreation chapter.

Objective 19		Reporting Agency		
To monitor, maintain and enhance indigenous fish populations and maintain a viable commercial fishing industry.		DCAL		
Indicative Actions	Reporting Agency	Partners	Timescale	
19a Implement the relevant recommendations of the CAL Committee report on Inland Fisheries.	DCAL		As Set	
19b Produce a comprehensive fish database that is regularly reviewed.	EHS	DCAL DARD AESD LNCo-op FCB	2005	
19c Produce a sustainable management plan for commercial species and a conservation management plan for pollan in consultation with fisheries owners.	DCAL	EHS LNCo-op	2006	
19d Implement the WFD within the timescales set out by the Directive including preparation of a Lough Neagh River Basin Management Plan.	EHS	EHS DARD	To be set by EHS	
19e Improve physical infrastructure at quays.	RAN	FM LCG LNCo-op	2006	
19f Raise awareness and appreciation of the importance of fish populations in the system using appropriate and targeted media.	LNP	LNAC DCAL		

**Aim: To manage, enhance and market recreational opportunities for local people and visitors, whilst ensuring the Lough Neagh Wetlands' environmental, economic and social integrity.**



### 6.1 Land Based Recreation

#### Recreational Potential

It is fair to say that Lough Neagh and its environs are not one of Northern Ireland's main activity based recreation destinations. However, local people and some enthusiasts appreciate that it has much to offer in terms of walking, cycling, bird-watching and for general relaxation. The unique wetland environment is by far the biggest attraction to those using the area for recreation. It is vital that the very people who seek to explore and enjoy it do not compromise the integrity of this resource.

#### Environmental and Human Disturbance

The matrix of wetland habitats within the Lough Neagh Wetlands are very important in environmental terms and it is vital that the associated archaeological heritage and flora and fauna, especially the wintering and breeding bird populations are not affected adversely by human recreational disturbance. Whilst individuals should be allowed to take part in all legitimate forms of recreation, it is important that other people living, working and also using the area for recreation, are not adversely affected by any one individual or activity. Therefore, recreational activities and access around and to the area must be carefully developed and managed to avoid situations of habitat, species, archaeological and human disturbance that could lead to potential conflict. In areas where the habitat and species are fragile, it may be necessary to keep public access to a minimum. There may also be a need to strengthen the local policing of illegal activities such as metal detecting that can interfere with the rich archaeological heritage.

#### Managing Human Activity

Low impact recreational activity takes place throughout the Wetlands, and in general, if people follow the Countryside Code and use their common sense, there are few, if any negative environmental effects and conflict situations. The majority of land based human activity is clustered in small 'honey pot' activity sites, near public services such as car parks, toilets and information points. Honey pot sites such as Oxford Island and Peatlands Park receive 195,000 and 90,000 visitors per annum respectively. Such clustering of human activity is welcomed as it helps to minimise impacts on the wider environment but, as these and similar sites can have large numbers of people at peak times, there is a need for careful and considered development and management to ensure minimal disturbance to habitats, wildlife and local residents. In addition to having local management groups concentrating on each honey pot site, and developing site specific management plans, it is essential that there is one body, with representatives from stakeholder groups, to oversee the management and future strategic development of recreation within the Wetlands region. Also infrastructure at sites and in the region in general should be of high quality and be well maintained to ensure that the Lough Neagh Wetlands has a high quality recreational product. There is a tendency for people to have more free time and money to apportion to recreational activity, and as well

as the wider Wetlands and the honey pot activity sites absorbing more people, consideration may have to be given to the expansion of existing honey pot sites or creation of new sites. Whilst it would be desirable to have only high quality, expertly managed recreational provision in the Wetlands before new activities and sites are considered, this is impractical on the ground. Any such proposals will have to be considered by statutory agencies and the overall management body in the light of existing provision, the carrying capacity of the area as a whole, the carrying capacity of each honey pot site, environmental considerations and the views of local residents.

**Economy, Tourism & Health**

Improving provision and expanding opportunities for well managed recreational activity can have significant knock on benefits for the local economy. It creates employment opportunities and can contribute to the economy of the surrounding area. This is particularly evident in the activity based tourism sector, an example being the Loughshore Trail where cyclists will be encouraged to sample the attributes of the Lough Neagh area and at the same time spend money in local pubs and shops and on accommodation. The increased tourism potential of Northern Ireland, and the considered development, management and marketing of the Wetlands as a quality environmental destination, could have a significant impact on the numbers of people using the area. Taking part in some form of recreational activity should be encouraged. Not only does it have the obvious benefits for physical and mental health, but it can also be a source of information and generally raise awareness of the quality environment. Encouraging people to explore and interact with the local environment can be one way of ensuring a sense of ownership and desire to become involved in managing the area. The links between a well-managed natural and built environment, a vibrant rural economy and a healthy local population are recognised.

Objective 20		Reporting Agency		
To manage and enhance recreational activity in the Wetlands giving due consideration to vital environmental, economic and social needs.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
20a Establish a stakeholder working group to monitor activity and provide strategic management and developmental advice for existing and any new land and water based recreational sites in the Wetlands.	LNP	LA RAN SH LNAC WWC	2004	
20b Ensure that existing and new recreation sites, access points and other developments have an adequate management structure that considers environmental and economic aspects, respects other user groups and produces and implements site management plans.	LNP	SH LA EHS LNAC PS	Ongoing	

Indicative Actions	Reporting Agency	Partners	Timescale
20c Carry out a study of existing and potential land and water based recreation in the Wetlands including: location, activity, numbers, infrastructure management, carrying capacity, temporal and spatial activity zonation, exclusion areas, potential expansion of sites, new sites, new environmentally and socially sustainable activities etc.	LNP	SC LA SH EHS LNAC LNCC	2004
20d Encourage upgrading of infrastructure at existing activity honey pot sites and access points to a high standard.	LNP	SH LA EHS LNAC	Ongoing
20e Produce environmental impact assessments, using the precautionary principle, for all appropriate new developments.	PS	EHS SH	Ongoing
20f Consider countryside access and liability concerns including the review of legislation.	DOE	CAAN UFU NIAPA	Ongoing



## 6.2 Water Based Recreation

### Supporting Infrastructure

As well as safe navigable waters, craft need supporting infrastructure on the shore. This includes slipways, moorings, quays, fuel provision, sewage pump-out, electricity, fresh water, hoists, showers, toilets, shops, pubs, recreational activities etc. Access points to the water should be strategically located, well maintained, dredged and managed and have an adequate access road network. In 1999 there were approximately 300 berths around the Lough. This increased to 420 in 2001. The two largest marinas are at Kinnego and Ballyronan, providing 140 and 70 well managed berths respectively. In the late 1990s/early 2000, many more public moorings were upgraded or created at Gawley's Gate, Emerson's, Castle Bay, The Battery, Curran Quay, Toome and Antrim. There are additional private quays around the shores of the Lough which can also act as safe havens. Whilst there are opportunities for boat repair and purchase of boating equipment, at present there are no sewage pumping facilities or fuel provision on the system. Additional facilities should be located strategically. If individuals do not have access to their own boat, opportunities to enjoy the Lough from the water are limited. At present, Craigavon Borough Council has two passenger craft operating on the south of the Lough, both with the ability to carry 12 passengers. One of these takes people to Coney Island. It is anticipated that the Maid of Antrim, with the potential to carry up to 100 passengers, will return to the system in 2003. Opportunities to sail are available through several of the boat and sailing clubs around the Lough.

### Management

The huge water surface of the Lough Neagh system has the capacity to absorb large numbers and types of water-based activity, both private and commercial. Water based recreational activities have differing demands. Whereas sailing and cruising take place over expansive areas of the Lough, in deep water, the majority of activities tend to take place in small, localised areas close to the shore access points. Close contact can lead to conflict with other users and

disturbance to the wildlife and environment. Levels of disruption and disturbance vary considerably with activity. In order to ensure that all legitimate users can practice their activity without negatively impacting on each other, local people or the environment, management rules, codes of conduct or byelaws must be drawn up and implemented both for public and private activity sites. In particular personal watercraft operators must be encouraged to operate in a responsible manner. It is reasonable to suggest that certain islands and high environmental quality shore based locations should be off limits to all boating visitors especially during the breeding season. The quality of the water in Lough Neagh and in particular at specific contact water sport locations can have implications for human health. Recommendations and actions associated with water quality and human health are contained within the Water chapter.

Objective 21		Reporting Agency		
To provide well-managed and serviced water access points and activities within the Lough Neagh system which do not impact negatively on local people or the environment.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
21a Establish a stakeholder working group to monitor activity and provide strategic management and developmental advice for existing and new land and water based recreational sites in the Wetlands.	LNP	LA RAN SH LNAC WWC	2004	
21b Carry out a study of existing and potential land and water based recreation in the Wetlands including: location, activity, numbers, infrastructure management, carrying capacity, temporal and spatial activity zonation, potential expansion of sites, new sites, new environmentally and socially sustainable activities etc.	LNP	SC LA SH EHS LNAC LNCC	2004	
21c Ensure that existing and new recreation sites, access points and other developments have an adequate management structure that considers environmental and economic aspects, respects other user groups and produces and implements water and land site management plans.	LNP	SH LA EHS LNAC PS	Ongoing	
21d Encourage upgrading of infrastructure at existing activity honey pot sites and access points to a high standard.	LNP	SH LA EHS LNAC	Ongoing	
21e Produce environmental impact assessments, using the precautionary principle, for all appropriate new developments.	PS	EHS SH	Ongoing	
21f Establish a branding initiative to indicate good water quality and good facility provisions.	LNP	LNAC EHS	2006	

Objective 5		Reporting Agency		
To ensure that water quantity is managed within the provision of the WFD to provide optimum conditions for the natural environment, economy, preservation of the archaeology and other stakeholders.		DARD		
Indicative Actions	Reporting Agency	Partners	Timescale	
5a Carry out water balance and assessment of ecological needs of water bodies within the Lough Neagh Catchment to meet WFD.	EHS	DARD WS PWA	As per WFD	
5b Review operation of water level management within the provision of the WFD to provide optimum conditions for the environment, economy and stakeholders.	DARD	LNAC SH	2006	
5c Raise awareness of the importance and complex nature of water levels in targeted audiences using appropriate media.	DARD	LNP LNAC	Ongoing	



### 6.3 Extending Navigable Waters

#### Improving Access to Rivers

The majority of commercial and recreational craft stay within the open Lough. Some recreational craft explore the Lower Bann River but the shallow nature of Lough Beg dictates that almost all craft stay within the navigation channel. The Lower Bann River links the system to the sea at Castlerock, but traffic is light. There are opportunities to extend the limit of navigable waters by improving access at the mouths of the Upper Bann and Blackwater Rivers. At present shallows restrict access and there are no formal navigation markers. Local knowledge is necessary. Once in these rivers, there could be an extra 11 miles of extremely attractive navigable water in the Blackwater to Blackwater Town and an extra 9 miles in the Upper Bann to the Point of Whitecoat. DCAL, formerly DARD, have provided a range of facilities along the Blackwater River which would be very attractive for new boaters. Unfortunately motorway bridges restrict air draft to 3.05m and 2.60m on the Bann and the Blackwater respectively. (Air drafts as of Dec 2001) Discussions are already taking place on improving the access into the Blackwater River.

#### Re-watering Ulster's Canal Network

Lough Neagh was once the hub of Ulster's Waterways and was linked to the Erne and all Ireland system via the Ulster Canal. For mainly economic reasons, the canal network was allowed to fall into decline with the Ulster Canal finally being abandoned in 1931. The recent increase in recreational activity and successful impact of the Shannon-Erne Waterway link has resulted in serious consideration being given to re-watering the canal network. The 45 mile long Ulster Canal is the most strategic and would link Lough Neagh with Lough Erne. This canal is half in Northern Ireland and half in the Republic of Ireland. A recent updated feasibility study has highlighted that it would cost £88.8m to reopen this canal ('A Feasibility Study into the Reopening of the Ulster Canal June 2001', Waterways Ireland). The route of the canal runs through some very disadvantaged rural areas and reinstatement could provide excellent economic opportunities for local residents. The recreational and tourism spin-offs



from the re-opening of the Shannon-Erne link were impressive, the effects of which have been experienced some distance from the canal itself. Although the economic appraisal for the Ulster Canal is negative, the prospects for reopening the Ulster Canal are currently under consideration by the NI and ROI governments. Any decision to reopen the canal would depend on the outcome of a full Environmental Impact Assessment that would address issues such as the spread of zebra mussels. The full impact of zebra mussels is not appreciated, but it is understood that they can have significant impacts on the ecosystem as a whole and can have serious economic implications. A feasibility study has also been updated on the re-watering of the 26 mile Lagan Canal, which would link Lough Neagh to Belfast Lough. The route of this canal does not travel through such disadvantaged areas but it would provide a recreational and economic artery between the Lough and the major centre of population. Whilst bids to attract funding to reopen the Newry Canal were unsuccessful, the 22 mile long towpath has become a significant land based recreational resource and has become one in a series of branded 'Way Marked Ways'. Similarly, the towpath of the Coalisland canal, which is due to be upgraded, provides a walking link from the Town to the Blackwater River. The towpath is to be upgraded, but the long term goal would be to have boats using the canal and mooring in the centre of Coalisland. With the reopening of the canal network, Lough Neagh could become a hub of water based activity. Strategically located holding basins near Maghery and Toome would provide a means of receiving and advising system new-comers. Serious consideration and resources must be given to ensure safety of navigation and supporting land based infrastructure.

Objective 22		Reporting Agency		
To extend the Neagh/Bann navigable and seasonal usage period.				
Indicative Actions	Reporting Agency	Partners	Timescale	
22a Continue to lobby for the re-watering of Ulster's canal network, giving priority to the Ulster Canal.	UWG	WI DCAL IWAI LNAC NIWC	Ongoing	
22b Raise Derrywarragh Bridge to facilitate access to the Blackwater River.	DCAL	LA IWAI	2002	
22c Consider dredging and marking the mouths of the Ballinderry, Moyola and Main Rivers with appropriate statutory consents.	DCAL	EHS LNR LA SH	2003	
22d Initiate dredging programme for the mouth and marking programme for the Blackwater River, with appropriate statutory consents.	DCAL	WI EHS LNR LNAC LA	2005	
22e Continue to liaise regarding the feasibility of individual projects, including increasing the air gap under the motorway bridges on Upper Bann and Blackwater Rivers.	DCAL	RS LNAC WI LA IWAI	Ongoing	

Indicative Actions	Reporting Agency	Partners	Timescale
22f Initiate a dredging programme for the mouth and marking programme for the Upper Bann River, with appropriate statutory consents.	DCAL	WI EHS LNR LNAC LA SH	2006
22g Revise misleading marker posts or extend dredging at mouth of Six Mile Water.	DCAL	LA WI IWAI LNAC	ASAP
22h Implement self-help projects that will re-water sections of the canal network.	IWAI	UWG DCAL LA UWG	Ongoing
22i Ensure spread of zebra mussels is addressed in EIA for Ulster Canal re-watering.	WI	EHS DCAL	2003
22j Raise awareness and appreciation of the economic and recreation potential of re-watering Ulster's Canal Network using appropriate and targeted media.	UWG	IWAI WI DCAL LNAC LNP NIWC	Ongoing



## 6.4 Wildfowling

### Background Information

Wildfowling is a traditional sport carried out by generations of local people around Lough Neagh. The habitat around the Lough supports many bird species but only some are the quarry of wildfowling. The most common quarry are diving ducks particularly pochard, tufted duck and goldeneye, the main concentrations of which arrive on Lough Neagh during the month of October, together with migrating flocks of Widgeon and semi-resident Mallard and Teal. Gadwall, Shoveler, Tufted Duck, Snipe, Partridge and occasionally, in the winter, geese are also shot around the Wetlands. The overall populations of these species have remained remarkably constant suggesting that wildfowling are taking a sustainable harvest. Shooting rights are exercised over approximately two thirds of the shore and on some islands. Wildfowl refuges exist and are managed by Local Wildfowling Clubs (LWC), private individuals, and other wildfowling collective organisations. Shooting leaseholds are also managed as refuges during the closed season and between shooting activity during the open season. In certain instances, LWC and the wildfowling collective organisations have entered into partnership management agreements with Environment & Heritage Service.

### Wildfowling Management

With a number of local exceptions, the Shaftesbury Estate of Lough Neagh Limited owns the wildfowling rights around Lough Neagh. The rights are leased out to various individuals, clubs and wildfowling collective bodies including BASC and the FLNLBW who also manage

activities within their jurisdiction. Recent consultation has shown that wildfowling are keen to become more involved in all aspects of management of the Lough Neagh Wetlands. Wildfowling have also indicated that more consultation is needed before recommendations relating to the management of wildfowling can be proposed. The LNAC is happy to facilitate this request. A number of LWC and collective wildfowling bodies have indicated that they would like to see more co-ordination between the various wildfowling bodies. This could be achieved through the establishment of a Wetlands Wildfowling Committee (WWC) for the area. One representative from this new committee could then represent wildfowling issues as necessary. Whilst it would be most advantageous for the LNAC to have one member that represents all wildfowling interests in the area, it does not wish to interfere with the day to day operation of the individual organisations. The LNAC is happy to facilitate/assist with the establishment of any such ‘Wetlands wildfowling committee’ if this is felt to be the most appropriate way ahead. If a wildfowling committee is established, it is anticipated that it would work towards a mutually accepted plan for the management of wildfowling possibly including the production of a voluntary Lough Neagh Wildfowling Code of Practice, a wildfowling self-wardening scheme and collection of annual shooting harvest data. The production of any wildfowl management plan and wildfowling code of practice for Lough Neagh must be supported by the majority of local wildfowling and by the holders of sporting rights to ensure delivery on the ground. The majority of wildfowling operating around the Lough are very responsible, and in general abide by existing legislation and rules of good practice. As with any activity, the unconsidered actions of one person can bring disrepute on a whole sporting fraternity. A number of areas are managed as wildfowl refuges, however wildfowling are unconvinced of the benefits of many of these and would welcome a review of the current refuges system. The FLBLNW, SACS and BASC all provide a degree co-ordination for wildfowling in the area.

**Habitat Management**

The wildfowling community makes an important contribution to habitat management and predator control and there is scope to expand this activity. Wildfowling can appreciate both sides of the recreation and access debate, but they have concerns over potential increase in both land and water based activities having a negative impact on wildlife, mainly through habitat and feeding disturbance. They believe that the emphasis should be on providing a sound framework for managing a limited increase in these activities.

Objective 23		Reporting Agency		
To ensure sustainable management of wildfowl and wildfowling for local people within the Wetlands.		WWC		
Indicative Actions	Reporting Agency	Partners	Timescale	
23a Carry out more detailed consultation with local wildfowling interests with a view to revising and expanding upon the wildfowling objectives and indicative actions	LNAC	SELN LWC/I BASC FLNLBW SACS	ASAP	

Indicative Actions	Reporting Agency	Partners	Timescale
23b Establish a Wetlands Wildfowling Committee for the Lough Neagh Wetlands that can co-ordinate wildfowling management activities.	LNAC	SELN LWC Individuals BASC FLNLBW SACS	ASAP
23c Produce wildfowl management plans for the Wetlands which would include details on wildfowling code of practice, local self-wardening system, predator control measures, habitat management, impact of feeding quarry species or releasing captive bred species etc.	WWC	EHS WWC SELN	2004
23d Raise awareness of wildfowling and the positive effects wildfowling can have on the local environment through the production of appropriate and targeted material.	WWC	FLNLBW BASC SACS LWC LNP	Ongoing



## 6.5 Angling

### Background Information

The whole system in terms of angling includes the tributaries, the inflowing rivers, the Lough and the Lower Bann River. The provision and development of a quality angling experience within the catchment is dependent on several factors including provision of high quality habitat, free fish movement, protection of stocks, sustainable management, creating access and targeted marketing. Human activity including hydro-electric schemes, river drainage, Lough lowering, poaching, sea netting, water pollution and habitat destruction have all affected the fishery over the past decades. It should be noted that the dollaghan, a variant of the brown trout, is unique to the Lough Neagh system. It migrates from the Lough to inflowing rivers from early summer and several specimens in excess of 10lbs are caught each year.

### Managing Fish Numbers

In the recent past, and with the assistance of funding programmes, angling clubs and stakeholder organisations have been involved in many positive projects including habitat improvement and reinstatement, and native species propagation. The benefits of such breeding programmes include the ability to maintain current river stock levels, invaluable restocking following pollution incidents and increasing biodiversity for example through the reintroduction of fresh water pearl mussels to rivers on the gills of fish. Free movement between tributaries, rivers, lough and sea is crucial to the maintenance of a healthy angling product. For this reason, a significant proportion of returning salmon must be allowed to enter the Lower Bann from the sea. Negotiations are taking place on the buy-out of commercial nets around the coast that catch large numbers of salmon returning to the Lower Bann. Migrating fish must be able to navigate round or over obstacles in rivers and at river mouths. Existing fish passes and new structures must be passable. The Salmon Management Plan has been in the production stage for several years. When finalised, hopefully in the near future, this should provide valuable advice for management of salmonid species.

**Angling Infrastructure**

With good numbers of salmon in the Lough Neagh system, large numbers of angling tourists will be attracted to the area. The inflow and outflow rivers associated with the Lough Neagh system are reasonably well developed in terms of providing an accessible angling product, although more could be done to improve the quality of the infrastructure for local people and to increase its capacity to attract high spending visitors. In consultation and with full agreement of the fishery owner, the Lough could be explored regarding its potential to be developed for shore or boat based angling. Activities on similar systems could be explored to highlight best practice that could be extrapolated to the Neagh system.



*Angling on the System.*

**Managing Angling**

Whilst the vast majority of anglers do not have a negative impact on the surrounding environment, there can be a need for discussions to avoid controversy. In particular, angling appears to be on the increase on Lough Beg and now continues into the winter months. Small boats containing fishermen move about the Lough spinning for pike. Negotiations have taken and are taking place between fishermen and wildfowlers to avoid conflict, but the potential disturbance impact on the waterfowl populations is unknown. Significant poaching of fish species in Lough Neagh and from the satellite Loughs, particularly Lough Beg, and the waterways is a continuing problem. It is crucial that the authorities do not relax their vigilance in this area and are adequately funded to undertake this work. Fish illegally caught in Lough Neagh and its environs can affect large parts of Northern Ireland, be they salmonid species that fail to spawn in the in-flowing rivers or coarse fish, including pike, that are removed and thus reduce those available to local and tourist anglers.

Objective 24		Reporting Agency		
To protect, sustainably manage and enhance indigenous fish stocks and fish movement in the Neagh/Bann system.		DCAL		
Indicative Actions	Reporting Agency	Partners	Timescale	
24a Continue to manage and improve breeding and feeding habitats for native fish species, giving due consideration to other indigenous species in the locality.	LAC	DCAL FCB EHS UAF UCFF FO	Ongoing	
24b Establish facts related to flow management regimes in the Lower Bann with reference to facilitating fish movement.	DCAL	DARD FO UAF	2004	

Indicative Actions	Reporting Agency	Partners	Timescale
24c Protect and restore the spring salmon run.	DCAL	UAF FO FCB	Ongoing
24d Continue production of a comprehensive fisheries information database including a study to identify the ownership of fishing rights where these have not been formally established.	DCAL	FCB UAF UCFF FO	Ongoing
24e Develop protection measures and highlight responsibility for the control and prevention of entry of invasive species, particularly zebra mussels.	EHS	DCAL UAF UCFF FO	Ongoing
24f Carry out a study to determine the impact of cormorants on the Lough Neagh system.	DARD	UAF UCFF FO DCAL	Ongoing
24g Implement the relevant recommendations of the Culture Arts & Leisure Committee report on inland fisheries.	DCAL	FCB UAF UCFF	
24h Implement the Water Framework Directive within the timescales set out by the Directive including preparation and implementation of a Lough Neagh River Basin Management Plan.	EHS	DARD WS LA ROI	To be set by WMU
24i Publish the Salmon Management Plan.	FCB	DARD DCAL	2002
24j Continue to prevent the illegal removal of game and coarse fish from all parts of the system.	FCB	DCAL BSL LNCo-op LAC	Ongoing

Objective 25		Reporting Agency	
Expand the opportunity for inclusive quality game and coarse angling in the Neagh/Bann system.		LNP	
Indicative Actions	Reporting Agency	Partners	Timescale
25a Carry out a practical investigation into the feasibility of angling on Lough Neagh in full consultation with the fishery owners and other interests.	DCAL	FO LNAC LNP SH UCFF UAF	2004

Indicative Actions	Reporting Agency	Partners	Timescale
25b Upgrade current infrastructure and access and highlight new game and coarse angling sites that have minimal potential impacts on the environment.	UCFF	FO LA LNP PS DCAL	Ongoing
25c Set up a sub group of the overall Lough Neagh and Lower Bann management structure to steer sustainable development of the angling product.	DCAL	UAF UCFF FO LNAC	2003



## 6.6 Marketing

### Background Information

People have more time and money to spend on activity and knowledge-based recreation. Lough Neagh is within reasonable travelling distance of the population of Northern Ireland and its proximity to ports of entry make it easily accessible to visitors to the province, but in recreation and tourism terms, it is a greatly under utilised resource. It has the capacity to be sustainably developed in terms of recreation and tourism activity without adversely affecting the local environment or population. Well managed recreational and tourism destinations can have the benefits of increased employment opportunities and a stronger local economy. There have been attempts to encourage more people to visit and experience the Wetlands, but the success was limited due to the relatively poor number of attractions and the lack of Lough Neagh brand or identity. Whilst Lough Neagh still has a low profile in terms of identity, there are now a larger number and variety of visitor attractions around the shore and hinterland which will appeal to a wider audience. It is fully recognised that Lough Neagh is an activity destination and should be sustainably developed, well managed, branded and marketed accordingly, primarily to people within Northern Ireland. It is also recognised that there is considerable growth in knowledge-based tourism and Lough Neagh has considerable environmental, historical and cultural resources that could form the basis of a successful knowledge-based tourism product. Obviously attention would have to be given to the infrastructure needed to support any increase in visitors, particularly accommodation. The current approach to marketing is piecemeal where the Lough falls within several of the designated NITB Regional Tourism Organisations (RTO). Several of the local authorities are not part of an RTO and therefore market their own areas and product. If Lough Neagh is to gain a higher profile as a quality activity or knowledge-based destination, the area must be seen to be well managed, there must be a strategic marketing body with input from stakeholders and local authorities, resources must be adequate and effectively targeted, the region must be effectively branded and marketing campaigns must be suitably targeted.

Objective 26		Reporting Agency		
To strategically promote and market the Lough Neagh Wetlands to locals and visitors as a quality environment, which can offer well managed, high quality land and water recreation and angling opportunities.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
26a Set up a working group, as part of the strategic management structure, with duties to include: <ul style="list-style-type: none"> <li>* Review and update the Lough Neagh Tourism and Recreation Study and if appropriate produce a marketing strategy.</li> <li>* Produce a database of local activities, sites of interest and accommodation.</li> <li>* Produce activity and interest based marketing material for target markets.</li> <li>* Develop a Lough Neagh brand identity and logo.</li> <li>* Promote development of Lough Neagh Wetlands concept.</li> </ul>	LNP	LNAC RTO NITB	2003 onwards	
26b Increase provision for public transport to and in the Wetlands.	LNP	LN/LBAC RTO NITB SH	2003 onwards	



**Aim: To provide a safe navigable water with a well resourced rescue service.**



### Background Information

Lough Neagh is an extensive, shallow inland sea with a large surface area. In windy conditions it can become rough very quickly. The navigable waters of the Lough, the Lower Bann and the lower reaches of the inflow rivers are used by both commercial and recreational craft. There is huge potential to increase boat numbers, particularly recreational craft, if the canal network is re-watered and if the Lower Bann navigation system is made more user-friendly. However, at present, the lack of a navigation authority for Lough Neagh is the main concern.



### Navigation Authority

Whilst the vast majority of navigable waters in the island of Ireland and in Britain have a navigation authority, at present there is no such body for Lough Neagh. This means that there is no dedicated organisation with responsibility for erecting navigational markers and signage, producing safety literature, ensuring that craft users are registered and competent or for producing byelaws or promotional materials. The current risk to navigating craft is unacceptable and it is therefore essential that a navigation authority is established as quickly as possible to ensure safety of navigation and to facilitate the promotion of a safe recreational waterway. Waterways Ireland (WI) are the navigation authority for the ROI, the Erne system and for the Lower Bann River. It would seem appropriate that its remit is extended to include Lough Neagh. Discussions are already taking place to this end. Any new navigation authority should maintain close liaison with local users, other system users and the rescue service.



### Rescue Service

Rescue on Lough Neagh is co-ordinated by HM Coastguard and in emergency situations it mobilises Lough Neagh Rescue (LNR). LNR has two stations, one at Kinnego in the southeast and the other at The Battery in the west. Each station has up to 20 voluntary crew members who are contacted using a bleeper system. Since its inception in 1989 to Sept 2001, LNR has been called out 485 times, has rescued 83 people from imminent danger and assisted 266 people out of the water. Although mostly called out to assist leisure craft, LNR performs a vital function for all craft. LNR operates a voluntary service, but its members are dedicated and possess significant expertise. The majority of local authorities around the Lough contribute financially to this service, but as this does not cover costs fully, and as there is no financial support from central government, LNR members are spending a lot of time submitting grant applications and organising fund raising activities. This time could be used for training purposes.

Objective 27		Reporting Agency		
To provide a safe, navigable and marketed waterway for commercial and recreational users.		LNP		
Indicative Actions	Reporting Agency	Partners	Timescale	
27a Set up a system wide navigation authority whose duties would include: <ol style="list-style-type: none"> <li>1. providing a safe user-friendly marker system and associated map/material, code of conduct, co-ordinated and other system compatible craft registration, formal navigational dredging programme, operational byelaws, policing, recreational zonation, promotional material for safe use and marketing</li> <li>2. ensuring craft handling competence, adequate safety equipment and adequate insurance cover</li> <li>3. advising on management of water level, safe havens, strategic location of fuel and sewage facilities and regular updates of the Admiralty Chart, and,</li> <li>4. liaison with craft users.</li> </ol>	WI	DCAL LNAC NIWC	2004	
27b Operate an inclusive local navigation user body to advise a new navigation authority.	LNAC	WI DCAL LNR CU	Ongoing	
27c To provide adequate rescue cover through encouraging central and local government to provide financial support for LNR.	LNR	DCAL LA MSA	Ongoing	
27d Ensure that there is a co-ordinated and up-to-date plan for a major disaster on the Lough.	DRD	LNR MSA	Ongoing	

## STRATEGIC MANAGEMENT

**Aim: To ensure integrated, coordinated management and sustainable enhancement of the environmental, economic and social resource of the Lough Neagh Wetlands.**



## 8.1 Advice

### Impartial Strategic Advice

The Lough Neagh Wetlands are an extremely complex system where people live, work, relax and interact with the natural environment. In order to maintain and enhance the area for local people and the indigenous wildlife, statutory agencies, local authorities, etc. need strategic, impartial advice on present and future management. It is vital that all recognised interests have a means of informing the strategic advice giving process. At present the Lough Neagh and Lower Bann Advisory Committees (LNAC & LBAC) provide impartial advice to central and local government on drainage & navigation, conservation of the natural and man-made environment and management and development of countryside recreation. The LNAC and LBAC have a wide membership including statutory bodies, local authorities and the many local interest/stakeholder organisations. The membership organisations of the Lough Neagh Advisory Committees is highlighted by the Department of the Environment and is shown in Appendix 4. Council representation on the Committees is high whilst representation from local community groups and the private sector is low. The Advisory Committees have a number of working groups that provide advice on particular topics including safety of navigation and water quality. It is recognised that additional working groups are necessary as highlighted in the actions of previous chapters. Each Advisory Committee operates in conjunction with a Co-ordinating Committee (LNCC), made up of statutory and local authority officers. The Co-ordinating Committee's role is to coordinate and progress action. Membership of the LNCC is shown in Appendix 5. Implementation of LNAC advice can be slow and not all advice is acted upon which can lead to frustration. It is recognised that greater links between the LNAC, LNCC and implementing bodies are needed. The Advisory and Co-ordinating Committees' term is operational until December 2003.

Objective 28	Reporting Agency		
To ensure the environmental, economic and social sustainability of the Lough Neagh Wetlands in compliance with the 'Wise Use of Wetlands' principle by providing strategic management information.	LNAC		
Indicative Actions	Reporting Agency	Partners	Timescale
28a Provide impartial, informed advice to ensure integrated, strategic management and sustainable development of the environmental, economic and social resources of the Lough Neagh Wetlands.	LNAC	SH LBAC	Ongoing
28b Revise LNAC membership to include adequate representation from stakeholder interests, including the community and private enterprise sector.	DOE	LNAC SH	2003

Indicative Actions	Reporting Agency	Partners	Timescale
28c Set up/operate working groups of the overall management structure to give advice on the following: <ul style="list-style-type: none"> <li>* Biodiversity</li> <li>* Water quality</li> <li>* Safety of navigation and</li> <li>* Strategic recreational development.</li> </ul>	LNAC	LNCC SH RAN LNP LBAC	2005
28d Review and strengthen lines of communication between LNAC, LNCC and implementing bodies, including the statutory agencies.	LNCC	LNCC LNP SH LBAC	Ongoing



## 8.2 Action

### Background Information

At present there are a number of organisations carrying out work around Lough Neagh, including local authorities, statutory agencies, stakeholder groups, local community groups and the private sector. Whilst the Lough Neagh Co-ordinating Committee is responsible for promoting implementation of the advice provided by the LNAC, there is no single body that can develop and implement strategic projects. A specific example was the need for a management forum for the Lough Neagh Cycle Way/Loughshore Trail. In the absence of such a strategic body, Cookstown and Western Shores Area network, a network of community groups, agreed to steer implementation of the capital works, with a view to handing future management to an organisation with a more strategic outlook. It was thought that this may have been a new Joint Committee, made up of local councillors, but this option has recently been put on hold.

### Lough Neagh Partnership

Whilst it is recognised that there should be rationalisation of the present Lough Neagh management system and structures, there is a need to have a separate organisation that could action projects on a strategic basis and that would have input from all relevant stakeholder and statutory organisations. For this reason, the **Lough Neagh Partnership (LNP)** has been registered as a Company Limited by Guarantee with interim directors. It is envisaged that the Inaugural General Meeting will be held later this year where up to 24 directors will be elected, half from the statutory sector and half from the community/voluntary sector. This new Company will be able to develop and implement projects, attract investment and market the area in a strategic manner. Whilst it is not envisaged that the LNP will carry out the statutory obligations of any government agency, it would be best placed to manage strategic projects such as the Loughshores trail. It is recognised that the introduction of LNP adds to the number of organisations with a remit for the strategic operation within the area, but it is intended that the LNP will operate in parallel with the existing Advisory and Co-ordinating Committee structure leading or supporting as appropriate specific actions as agreed through the LNMS. This overall management structure should be reviewed in 2003.

**Implementation of LNMS**

The Lough Neagh Advisory Committee will monitor the implementation of the recommendations contained within this Management Strategy, but implementation of each action lies outside the remit of the LNAC and as such a ‘reporting agency’ and potential partners have been highlighted. The reporting agencies have not yet given a commitment towards implementation by the allocated time scale or to source any of the necessary resources. Therefore it has not been possible to ensure that all the objectives mentioned in this document are SMART (specific, measurable, achievable, realistic and time bound). At present the details are the **recommendations of the Lough Neagh Advisory Committee and not firm commitments**. It is also proposed that progress towards implementation of the individual actions is reviewed each year and that progress on the implementation of the overall objectives is reviewed every five years. It will also be the role of the Lough Neagh Advisory Committee to lead this review process.

**Resources**

Obviously the statutory agencies secure and allocate resources to ensure they meet their statutory obligations. It would aid implementation of the Strategy if statutory agencies could also secure resources for the implementation of the non-statutory recommendations. In addition, the working group responsible for setting up the LNP is attempting to secure resources that can be redistributed for strategic projects, many of which have been highlighted in this LNMS.

**Liaison**

It is recognised that there is a need for close liaison between any new partnership, existing organisations and other bodies, including the Integrated Local Strategies of local authorities. Given the importance of the EU Water Framework Directive and the obligation to produce a river basin management plan for the area, there will also be a need for close liaison between Government and the various existing management organisations.

Objective 29		Reporting Agency		
To ensure the environmental, economic and social sustainability of the Lough Neagh Wetlands in compliance with the ‘Wise Use of Wetlands’ principle by implementing projects.		LNCC		
Indicative Actions	Reporting Agency	Partners	Timescale	
29a Steer implementation of the recommended actions in the LNMS and hold annual progress meetings.	LNAC	LNP LNCC LBAC	Annually	
29b Review the implementation of the LNMS at the recommended objective level on a five yearly basis.	LNAC LNCC	LBAC LBCC	Every 5 years	
29c Formalise the Lough Neagh Partnership to enable development, implementation and securing of resources for strategic projects.	LNAC	LNCC LABS RAN	2002	

Indicative Actions	Reporting Agency	Partners	Timescale
29d Formalise the Lough Neagh Joint Committee to enable strategic management of the Loughshores Trail and implementation of appropriate local authority lead projects.	CBC	LA	2002
29e Ensure representation from local community and stakeholder groups on local management and action bodies.	RAN	LNAC LNP SH	Ongoing
29f Set up/operate working groups of the overall management structure to steer action on the following: Marketing Education and awareness Angling Development Local Heritage	LNP	LNCC SH RAN LNAC LBAC	2005
29g Review and strengthen lines of communication between LNAC, LNCC and implementing bodies, including the statutory agencies.	LNCC	LNCC LNP ALL LBAC	Ongoing
29h Review LNAC/LNCC/LNJC/LNP structure.	DOE	LNAC LNCC LNJC LNP SH	2003

## SUSTAINABILITY APPRAISAL

The following table has been produced to ascertain if the recommended objectives for the future management of Lough Neagh are sustainable in environmental, social and economic terms. Each objective has been assessed against ten criteria. If implementation of a particular objective could result in a negative impact on the environment, economy or society, then appropriate action should be taken as highlighted in the comments column.

### Explanation of Assessment Criteria

Assessment Criteria	Explanation
1. Natural Heritage	Habitats, plants and animals.
2. Built Environment	Archaeological sites and monuments, historic and vernacular buildings, industrial heritage features etc.
3. Landscape Quality	Characteristic patchwork of open water, farm land, field boundaries, drains, wetland habitats, rampart roads etc.
4. Current Economy	Activity within the area that provides employment opportunities for local people and any financial impact on local people.
5. Economic Potential	Ability of the area to attract alternative and future opportunities for local employment such as in the tourism industry.
6. Quality of Life	The wealth of opportunities available to local people that influence the quality of their day-to-day life and opportunities.
7. Public Health	Mental and physical wellbeing of the local population.
8. Social Equity	Having the same opportunities to access a quality life as everyone else.
9. Future needs/choices	Having a choice, making choices and being able to satisfy your day-to-day needs.
10. Public input/partnerships	Having the opportunity to have a say in decisions that affect your life and surroundings.

### Explanation of symbols

- ✓ favourable or positive impact
- ✗ negative impact
- no overall impact/not relevant
- ? uncertain

Objective 1		
To implement the Water Framework to achieve 'good' status' including the preparation and implementation of a Lough Neagh River Basin Management Plan.		
Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	The implementation of the WFD and the preparation of the Lough Neagh River Basin Management Plan will lead to sustainable management of the surface and ground water of the system. In Lough Neagh, there will be a focus on improving water quality in terms of phosphorus reduction. This will involve working with the agricultural community to reduce diffuse sources of phosphorus. Reducing the input of phosphorus will prevent the Lough from becoming even more eutrophic and should allow the process of recovery to start. Whilst the future release of phosphorus from the substrate is an unknown quantity, reducing the input should have knock on benefits for local people and the economy, for example, through reducing algal growth with the associated negative publicity. Preparation of the WFD must involve public participation. River/catchment management groups will ensure that local people can act as guardians of their own areas.
2. Built Environment	—	
3. Landscape Quality	✓	
4. Current Economy	✓	
5. Economy Potential	✓	
6. Quality of Life	✓	
7. Public Health	✓	
8. Social Equity	✓	
9. Future needs/choices	✓	
10. Public input/partnerships	✓	

Objective 2		
To reduce the number of high and medium severity pollution incidents by 20% on a NI basis (based on 1996 figures) and redress the effects.		
Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	Reducing the number and severity of pollution incidents will improve the local natural environment and landscape quality in general. In agricultural terms, the upgrade of storage facilities for slurry etc. may have a negative economic impact on individual farmers, but the benefits to the environment as a whole, should result in a positive long-term economic impact. An improved environment will have the usual knock
2. Built Environment	—	
3. Landscape Quality	✓	
4. Current Economy	?	
5. Economy Potential	✓	
6. Quality of Life	✓	
7. Public Health	✓	



8. Social Equity	✓	on positive benefits for the local population. River catchment groups will ensure that local people can act as guardians of their own areas.
9. Future needs/choices	✓	
10. Public input/partnerships	✓	

Objective 3		
To ensure that appropriate areas of Lough Neagh have water of sufficient quality for contact water sports.		
Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	Improving the water quality at contact water sport locations will probably attract greater usage, which in turn may involve greater on-land infrastructure and the potential for greater disturbance to Lough shore habitats and species and potential landscape interruption. Careful planning and monitoring will be required, along with enforced honey pot management plans. Implementation of this objective may be slow as it includes revising an EC Directive. In the mean time, local authorities should continue to monitor water quality at appropriate locations within their jurisdiction. Branding initiatives could be introduced to inform people not only of good water quality, but also of good facilities. This will involve local people working in partnership with public and statutory agencies.
2. Built Environment	—	
3. Landscape Quality	?	
4. Current Economy	✓	
5. Economy Potential	✓	
6. Quality of Life	✓	
7. Public Health	✓	
8. Social Equity	✓	
9. Future needs/choices	✓	
10. Public input/partnerships	✓	

Objective 4		
To reduce the input and increase the removal of flotsam to Lough Neagh's Watercourses.		
Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	At present the levels of flotsam in the Lough are unacceptable and provide a very negative visual image of the Lough. Removal will improve the environment, economic potential and amenity value for local people. Removal and prevention will involve working in partnership.
2. Built Environment	✓	
3. Landscape Quality	✓	
4. Current Economy	✓	
5. Economy Potential	✓	
6. Quality of Life	✓	

7. Public Health	✓	
8. Social Equity	✓	
9. Future needs/choices	✓	
10. Public input/partnerships	✓	

**Objective 5**

To ensure that water quantity is managed within the provisions of the WFD to provide optimum conditions for the natural environment, economy, preservation of archaeology and other stakeholders.

Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	The Water Framework Directive takes environmental, economic and social factors into consideration, and as such the impacts of implementation should be positive. Implementation of optimum water level management should be informed by consultation and through a partnership process. There needs to be a wide awareness raising programme to ensure that all users can appreciate the needs of others and of the environment.
2. Built Environment	✓	
3. Landscape Quality	✓	
4. Current Economy	✓	
5. Economy Potential	✓	
6. Quality of Life	✓	
7. Public Health	✓	
8. Social Equity	✓	
9. Future needs/choices	✓	
10. Public input/participation	✓	

**Objective 6**

To ensure an adequate supply of potable water.

Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	
1. Natural Heritage	✗	If too much water is taken from Lough Neagh, there could be a negative impact on the integrity of the wetland ecosystem, the landscape quality, as well as impacting on the indigenous economies of fishing, sand extraction and water based recreation through reducing water levels, with the impacts on navigational safety. The volume of water abstracted must not exceed that agreed previously after consultation with stakeholders. Government has a responsibility to provide potable water for the
2. Built Environment	—	
3. Landscape Quality	✗	
4. Current Economy	✗	
5. Economy Potential	✗	
6. Quality of Life	—	
7. Public Health	✓	
8. Social Equity	✓	

9. Future needs/choices	✘	population of Northern Ireland and Lough Neagh will continue to be a source. This takes choice and decision making through partnership away from local people. Resources must be allocated to upgrade the water transportation network to ensure water loss is at a minimum before additional water is abstracted from the Lough.
10. Public input/partnerships	✘	

Objective 7		
To conserve, monitor, manage and where appropriate enhance and restore, important habitats and species in the Lough Neagh Wetlands.		
Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	Improving habitats and species will impact positively on biodiversity. Managing the wetland habitats for biodiversity will have initial resource implications for land managers, but the long term benefits of a more sustainably managed environment and landscape will attract future economic investment and provide an attractive area for local people to relax. The change from production subsidies to financial allocation for sustainable land management has already begun. It is vital that local people should be encouraged to become involved in habitat and species restoration projects.
2. Built Environment	—	
3. Landscape Quality	✓	
4. Current Economy	—	
5. Economy Potential	✓	
6. Quality of Life	✓	
7. Public Health	✓	
8. Social Equity	✓	
9. Future needs/choices	✓	
10. Public input/partnerships	✓	

Objective 8		
To prevent the introduction and, where possible, control the spread of invasive species in the Lough Neagh Wetlands.		
Assessment Criteria: "Implementation of this objective will impact on the ..."	Impact	Comments
1. Natural Heritage	✓	The accidental introduction of zebra mussels to the Lough Neagh system could have implications for the integrity of the ecosystem and also have huge economic implications in terms of the fouling of water abstraction and water based recreation infrastructure. The re-watering of the Ulster Canal will most certainly have huge implications for the spread of zebra mussels. If the reopening of the
2. Built Environment	✓	
3. Landscape Quality	✓	
4. Current Economy	—	
5. Economy Potential	?	
6. Quality of Life	✓	