

Draft Monaghan County Development Plan 2013-19

**Incorporating the Development Plans for the towns of
MONAGHAN, CARRICKMACROSS, CASTLEBLAYNEY,
CLONES & BALLYBAY**



**Strategic Environmental Assessment
(Environmental Report)**

**Addendum
Amendments in response to submissions received
in respect of the SEA Environmental Report**

December 2012

Introduction

The Draft Monaghan County Development Plan (Incorporating the draft Development Plans for the Towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay) 2013-2019 and associated Environmental Report were placed on public display on 31st May 2012 for a period of ten weeks, with submissions invited up to and including 10th August 2012.

Following the consultation period the Managers of the County Councils and Town Councils prepared report on submissions received in relation to the Strategic Environmental Assessment (Environmental Report). The Managers' reports also contained a series of recommendations on proposed amendments to the Environmental Report and were presented to the elected members for consideration.

The Managers' reports on the submissions received in relation to the Strategic Environmental Assessment were considered by the elected members and the respective councils resolved that this addendum be incorporated within the Environmental Report.

The sections of the Environmental Report where amendments have been made are set out in the following pages. The specific amendments are indicated in red.

Amendments to the Environmental Report

Non Technical Summary

Alternative Approaches to Making the Draft Development Plans

Part of the SEA process requires the consideration of 'reasonable alternatives'. In selecting SEA Alternatives, cognisance must always be taken of parent strategies and documents which have a key influence on how alternatives were framed. **Section 5.0 of this Environmental Report entitled "Assessment of Alternatives and Selection of Preferred Scenario" sets out and examines the following 3 alternative growth models. ~~The following three scenarios were formulated and considered:~~**

- **Growth with Relaxed Planning Policies**
- **Growth with Restrictive Planning Policies**
- **Planned Growth with Regulatory Planning Policies**

Alternative 1: Growth with Relaxed Planning Policies

This scenario would involve minimal intervention in terms of strategic planning which would ultimately result in allowing development to follow market forces to a great extent and would take a short-term planning, economic, social and environmental approach.

Alternative 2: Growth with Restrictive Planning Policies

This scenario would represent a restrictive approach to the development in the county. This approach would result in the concentration of development within the larger towns of the county. Development would be served by appropriate infrastructure and there would be strict demarcation between urban and rural areas. Areas of the county which are the subject of ecological designations would be carefully managed and sustained. This approach would strengthen the main towns of the county but would also put pressure onto existing services and facilities in the towns and in addition, the vitality of the rural community would stagnate. This approach would have major environmental benefits but would result in a decline in the social, cultural and economic wellbeing of rural areas. This approach would not result in a coordinated, balanced growth of the county.

Alternative 3: Planned Growth with Regulatory Planning Policies

This scenario is based around the planned growth of the County and a sustainable settlement structure based on the Settlement/Core Strategy. This will afford for the balanced and sustainable development of the County. In this scenario, the principles of sustainable development are integrated into the Plan.

Scenario 3 was considered the most appropriate development model for the future development of County Monaghan. Scenario 3 affords for the most effective way of focusing growth and development within the county whilst ensuring the economic, environmental, cultural and social prosperity of the county.

3.2: Monaghan County Development Plan 2013-2019 – Vision Statement

The strategic aims of the five local authorities in County Monaghan in preparing the Draft County and Town Development Plans are to:

- **Sustainably** develop the potential of each part of the County in economic, social and environmental terms.
- Sustain traditional settlement patterns, while developing the role and function of each town, village and settlement throughout the county –
 - Developing Monaghan Town as a hub town with a target population of 9,000 by 2020
 - Developing Carrickmacross, Castleblayney Clones and Ballybay towns as attractive, viable service centres to meet the needs of their surrounding hinterlands
 - Sustaining the vitality of the villages and settlements throughout the county as sustainable service centres to meet the needs of rural communities.
- Improve transport linkages and communications between County Monaghan and its neighbouring counties, and to capitalise on the county's strategic spatial location.
- Support balanced economic development throughout the county by delivering improved infrastructure and services.
- Preserve the environmental quality of the natural and built environment in rural and urban areas.
- Improve the quality of life of all who live and work in the county.

Whilst the Draft Plans aims to foster economic development and improve infrastructure and services, the conservation and protection of the environment and heritage of the county must also have priority, and consequently the Draft Plans contain comprehensive policies and guidelines for the protection of the built and natural heritage and a record of protected structures and monuments.

3.3.7: ~~Shaping Our Building a Better Future~~, Regional Development Strategy (RDS) Northern Ireland 2035

Due to County Monaghan's boundary with Northern Ireland, regard must be attached to ~~Shaping Our Building a Better Future~~ which is a Regional Development Strategy, ~~which~~ offering a strategic and long-term perspective on the future development of Northern Ireland up to the year ~~2025~~ 2035. ~~This revised Regional Development Strategy was published on 15 March 2012 following the ten year review of the Regional Development Strategy 2025 (RDS) produced in 2002 is currently underway with the public consultation period commenced on 6th January 2011 to 31st March 2014.~~ The RDS was prepared in close consultation with the community. The RDS 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 spatially based economy, a healthy living environment and an inclusive society which tackles inequalities relating to health, education and living standards.

The promotion of sustainable development allied to social and economic cohesion is an integral part of the drive to provide a strategic and long-term perspective for the development of the region up to the year ~~2025~~ 2035.

In addition to the above, Table 2 on the following pages, lists plans, programmes strategies and legislation containing environmental protection obligations, objectives,

indicators and targets that must be considered within the development plan making process.

Table 2: Relevant National and International Strategic Policies and Objectives

	Plan, Programme Strategy or Legislation	Key Consideration for Draft Development Plans
BIODIVERSITY, FLORA AND FAUNA		
INTERNATIONAL	Strategic Environmental Assessment (SEA) Directive 2001/42/EEC.	Requirement to carry out SEA.
	Convention on Wetlands of International Importance 1971 (amended 1982 and 1987) (Ramsar Convention).	Requirement to protect sites from loss or damage by development.
	Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora.	Requirement to carry out an Appropriate Assessment
	Directive 79/409/EEC on the conservation of wild birds.	Requirement to carry out an Appropriate Assessment
	UN Convention of Biological Diversity.	Requirement to protect and enhance ecological resources.
	Bern Convention on the Conservation of European Wildlife and Natural Habitats (1979)	Requirement to maintain diversity and distinctiveness.
	Pan-European Biological and Landscape Diversity Strategy (1995)	Requirement to maintain diversity and distinctiveness.
	European Biodiversity Strategy (1998)	Requirement to maintain diversity and distinctiveness.
	Freshwater Fish Directive (78/659/EEC)	Requirement to maintain diversity and distinctiveness.
	Shellfish Waters Directive (79/923/EEC)	Requirement to maintain diversity and distinctiveness.
NATIONAL	Planning and Development (Strategic Environmental Assessment) Regulations 2004 as amended.	Requirement to carry out SEA.
	Flora Protection Order 1980 as amended.	Protection of species.
	Forestry Act 1946	Protection of species.
	Wildlife Act 1976	Protection of species.
	Wildlife (Amendment) Act 2000	Protection of species.
LOCAL	National Biodiversity Plan 2010-2015	Requirement to maintain biodiversity.
	Monaghan Biodiversity Action Plan 2009-2014	Requirement to maintain biodiversity.

SOIL		
INTERNATIONAL	EU Thematic Strategy for Soil Protection	Aims to maintain and protect soil quality.
NATIONAL	National Soil Survey of Ireland	Inform the Draft Plan
WATER		
INTERNATIONAL	Directive 2000/60/EC Water Framework Directive	Requirement to achieve good ecological status by 2015 and ensure that their status does not deteriorate.
	Directive 2007/60/EC Flood Risk Management	Assessment and Management of Flood Risk
	EU Drinking Water Directive (98/83/EC)	Requirement to achieve and maintain good quality drinking, surface, bathing and wastewater.
	EU Nitrates Directive (91/676/EEC)	
	EU Groundwater Directive (80/68EEC)	
	EU Surface Water Directive (75/440/EEC)	
	EU Urban Waste Water Directive (91/271/EEC)	
EU Dangerous Substances in Water Directive (79/464/EEC).		
NATIONAL	Neagh Bann International River Basin Management Plan	Contains river basin catchments that flow into County Monaghan and rivers that have catchments in County Monaghan.
	North Western International River Basin Management Plan	
	The Planning System and Flood Risk Management – Guidelines for Planning Authorities 2009	Assessment and Management of Flood Risk
	The Local Government (Water Pollution) Act 1997, amended 1990	Requirement to achieve and maintain good quality drinking, surface and waste water.
	The Local Government (Water Quality Standards for Phosphorous) Regulations 1998	
	EPA Wastewater Treatment and Disposal Systems Serving for Single Houses 2009	
	Water Management Unit Action Plans in the North Western International River Basin District	Implements the requirements of the EU Water Framework Directive to ensure good quality by 2015.

LOCAL	Water Management Unit Action Plans in the Neagh Bann International River Basin District	
CLIMATE CHANGE		
INTERNATIONAL	European Climate Change Programme	Aims to reduce emissions
	Kyoto Protocol 1997	Sets international targets and mechanisms for addressing climate change.
	Directive 2001/92/EC Energy Performance of Buildings	Aims to conserve energy.
	Air Framework Directive, Directive on Air Quality Assessment and Management 1996/62/EC	Aims to reduce emissions
	Directive on National Emission Ceilings for Certain Atmospheric Pollutants 2001/81/EC	
	Directive 2009/28/EC use of renewable energy and cleaner transport	
NATIONAL	National Climate Change Strategy 2007-2012	Aims to reduce emissions.
	National Renewable Energy Action Plan	
	<u>National Cycle Policy Framework 2009-2020</u>	
	Smarter Travel	
MATERIAL ASSETS		
INTERNATIONAL	Directive 99/31/EC Landfill Directive	Sets targets for reducing waste to landfill.
	Directive 2002/96/EC The WEEE Directive on Waste Electrical and Electronic Equipment.	
NATIONAL	Waste Management Acts 1996-2005	Sets National Policy and legislation
	Waste Management Regulations 2001	
	Quarries and Ancillary Actions 2004	
	Planning and Development (Strategic Infrastructure) Bill 2006	
	Roads Act 1961-2007	
	EPA Landfill Manuals	Provides guidance on landfills
	Transport 21	Provides investment in Ireland's transport system
	DoEHLG Policy Statement: Waste Management- Taking Stock and Moving Forward, 2004	Policy Statements which expand on National Policies
	DoEHLG Policy Statement: Preventing and Recycling Waste, 2002	

	DoEHLG Policy Statement: Waste Management, Changing Our Ways, 1998	
	North East Waste Management Plan	Provides policies for future improvement and development, and the means to implement and monitor progress in the years to come
CULTURAL HERITAGE		
INTERNATIONAL	Granada Convention for Protection of the Architectural Heritage of Europe 1985	Overarching framework for protection of Architectural Heritage
	European Convention for Protection of the Architectural Heritage of Europe 1992	
NATIONAL	National Monuments Acts 1930-1994	Sets National Legislation and Policy governing archaeological structures and sites.
	Architectural Heritage Protection – Guidelines for Planning Authorities 2004	
	National Monuments (Amendment) Act 2004	
	National Monuments Regulations 2005	
	Planning and Development Acts 2000-2010	Sets National Legislation governing historic buildings
	National Heritage Plan 2004	Sets National Policy
LOCAL	Draft County Monaghan Heritage Plan 2012-2017	Co-ordinates activities and work by organisations to deliver benefits for Monaghan's heritage
LANDSCAPE		
INTERNATIONAL	European Landscape Convention 2000	Requires protection and enhancement of landscapes
NATIONAL	Draft Landscape and Landscape Assessment Guidelines 2000	
INTERRELATIONSHIPS/SUSTAINABLE DEVELOPMENT		
INTERNATIONAL	European Strategy for Sustainable Development 2006	Identifies key priorities for sustainable development.
	6 th Environmental Action Plan of the European Community 2002	Encourages integration of environmental issues across all sectors of policy
	The EU Environment and Health Strategy 2004-2010	Promotes Sustainable development
	Agenda 21 – Action for Sustainable Development 1992	
	The Gothenburg Strategy – Communication from the Commission on Sustainable Europe for a Better World 2001	
	Sustainable Rural Housing Guidelines for Planning Authorities 2005	

	Sustainable Development- A Strategy for Ireland 1997	
	Making Ireland's Development Sustainable 2002	
	National Development Plan 2007-2013	
	Sustainable Residential Development in Urban Areas 2008	
	Sustainable Urban Housing: Design Standards for New Apartments, Guidelines for Planning Authorities, 2007	
	The Provision of Schools and the Planning System 2008	
	Childcare Facilities Guidelines 2001	
AIR QUALITY		
INTERNATIONAL	EU 'Air Framework Directive' (1996/62/EC)	To improve air quality and control emissions.
	EU Directive on National Emission Ceilings for Certain Atmospheric Pollutants	
	WHO Air Quality Guidelines 1999	Recommends air quality levels and improvements.
NATIONAL	Draft National Air Quality Monitoring Programme 2000	To improve air quality and control emissions.
PLANNING		
NATIONAL	Planning and Development Acts 2000-2010	Sets National Legislation and Policy
	National Spatial Strategy	
LOCAL	Border Regional Planning Guidelines 2010-2022	Sets out a framework for proper planning & development of the Region

5.1.4: Preferred Scenario

Table 3 below provides a summary of the Evaluation of the Scenarios mentioned in Sections 5.1-5.13 above.

Table 3: Summary of Evaluation of Scenarios against SEA Environmental Objectives.

	BFF	POP	HH	S	W	A	CF	MA	CH	L	
Alternative 1	-	0	-	-	-	-	-	-	-	-	Generally Negative
Alternative 2	+	-	-	+	+	+	+	-	0	+	Generally Positive
Alternative 3	+	+	+	+	+	-	-	+	0	+	Generally Positive

+ = Positive Impact

- = Negative Impact

0 = Neutral Impact

BFF: Biodiversity, Flora and Fauna

POP: Population

HH: Human Health

S: Soils

W: Water

A: Air

CF: Climatic Factors

MA: Material Assets

CH: Cultural Heritage

L: Landscape

Alternative 1: Growth with Relaxed Planning Policies

This scenario would involve minimal intervention in terms of strategic planning which would ultimately result in allowing development to follow market forces to a great extent and would take a short-term planning, economic, social and environmental approach.

Alternative 2: Growth with Restrictive Planning Policies

This scenario would represent a restrictive approach to the development in the county. This approach would result in the concentration of development within the larger towns of the county. Development would be served by appropriate infrastructure and there would be strict demarcation between urban and rural areas. Areas of the county which are the subject of ecological designations would be carefully managed and sustained. This approach would strengthen the main towns of the county but would also put pressure onto existing services and facilities in the towns and in addition, the vitality of the rural community would stagnate. This approach would have major environmental benefits but would result in a decline in the social, cultural and economic wellbeing of rural areas. This approach would not result in a coordinated, balanced growth of the county.

Alternative 3: Planned Growth with Regulatory Planning Policies

This scenario is based around the planned growth of the County and a sustainable settlement structure based on the Settlement/Core Strategy. This will afford for the balanced

and sustainable development of the County. In this scenario, the principles of sustainable development are integrated into the Plan.

Scenario 3 is the preferred Scenario for the future development of County Monaghan and forms the basis of the preparation of the Draft Monaghan County Development Plan 2013-2019 (incorporating the draft development plans for the Towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay).

Scenario 3 affords for the most effective way of focusing growth and development within the county whilst ensuring the economic, environmental, cultural and social prosperity of the county.

6.2.6: Natura 2000 Sites outside the Plan Area

The Guidance document produced by the Department of the Environment, Heritage and Local Government “Appropriate Assessment of Plans and Projects in Ireland” indicates that Natura 2000 sites within 15km of the plan area should be considered when assessing whether the plan is likely to have environmental affects. There are 12 Natura 2000 sites which are located within 15km of the plan area and are listed in the table below.

Table 4: Natura 2000 sites within 15km of Plan Area.

Site Name	Site Type	Site Code
Dundalk Bay	SPA	004026
Stabannan/Braganstown	SPA	004091
Dundalk Bay	cSAC (candidate)	000455
Lough Oughter	SPA	004049
Lough Oughter	cSAC (candidate)	000007
Slieve Gullion	SAC	UK0030277
Sliabh Beagh	SAC	UK0016622
Moninea Bog	SAC	UK0030212
Magheraveely Marl Lough	SAC	UK0016621
Lough Neagh	SPA	UK9020091
Upper Lough Erne	SPA	UK9020071
Upper Lough Erne	SAC	UK0016614

6.2.7: Natural Heritage Areas and Proposed Natural Heritage Areas

Some nature sites are identified as Natural Heritage Areas (NHAs). The Wildlife (Amendment) Act 2000 provides a statutory basis for the designation of NHAs. Out of the 65 NHAs designated nationally, only one NHA is in County Monaghan – Eshbrack Bog NHA on Bragan. All of the other Monaghan NHAs remain on the proposed list and rely on the protection afforded to them through the County Development Plan. The Proposed Natural Heritage Area (pNHA) is the most common nature designation in County Monaghan and sites can be designated for scientific, landscape or geological interest. In county Monaghan there are pNHA’s comprising mainly wetland habitats, such as lakes, rivers, marshes, fens, bogs and woodland. These are recognised by Monaghan Local Authorities as important conservation areas and development will only be permitted in these areas where the integrity of these sensitive areas is not threatened.

Table 5: Natural Heritage Areas and Proposed Natural Heritage Areas

Location	Description	Status
Eshbrack Bog	Blanket bog with several small acid upland lakes, areas of bog uncommon in County Monaghan.	NHA
Annagheane Lough	Small acid lake surrounded by dense woodland dominated by Downy Birch. High number of habitat types and interesting sequence of vegetation zonation.	pNHA
Ballyhoe Lough	Acid peaty lake which supports wild fowl. Site of remains of a giant Irish Deer	pNHA
Black & Derrygooney Loughs	Roosting, feeding and nesting sites for wildfowl	pNHA
Cocreeghy Lake & Woodlands	Intact succession from open water to woodland, contains marsh fen rare in Monaghan. Wetland is notable as it occurs in area of shale and grits.	pNHA
Cordoo Lough	Good example of typical lake plant life	pNHA
Creevy Lough	Reed less lake with plant communities not found at other lakes in the region	pNHA
Dromore Lakes	Lake woodland, narrow water bodies, wintering site	pNHA
Drumakill Lough	Interesting example of zonation from aquatic vegetation to meadowland. Rich flora, floating fen	pNHA
Drumcor Lough	Part of Black Pigs Dyke/ Worms Ditch	pNHA
Drumgole Lough	Lake on Silurian slates, several uncommon species	pNHA
Drumreaske Lough	Calcareous lake surrounded by pockets of woodland and marshland with interesting plant species.	pNHA
Emy Lough	Foremost wintering area for greylag goose in the county	pNHA
Gibson's Lough	Small lake surrounded by floating fens	pNHA
Glaslough Lake	Calcareous lake with reed beds and a number of wooded islands supporting wildlife	pNHA
Kilcorran Lough	Large highly calcareous lake in the River Finn system. A small catchment in limestone drift ensures a high calcium status with a substrate of precipitated marl and a relatively low nutrient status. The management of the grassland slopes above the lake is critical.	pNHA
Killyhoman Marsh	Succession from solid scraw to birch, alder and willow woodland also plant species including horsetail and sedge.	pNHA
Killyvilly Lough	Calcareous lake and two rare species of stonewort have been recorded. Site is regularly used by a variety of birds including Mute Swan, Snipe and Pheasant.	pNHA
Kilroosky Lough Clustet	Calcareous lakes with interesting plant species	pNHA
Lisabuck Lough	Attention originally drawn to the lake because of the presence of Slender Tufted Sedge, but it is also a good site representative of the swarm of small lakes characteristic of the drumlin belt in Co. Monaghan which together represent a substantial wetland area.	pNHA
Lisarilly Bog	Small fen in transition to raised bog	pNHA

Lislannan Bog	An area of floating marsh and fen vegetation. It was identified as the only area of acid scraw and bog vegetation in the calcareous part of the Finn/Lacky catchment. Bog appears to be drying out.	pNHA
Lough Egish	Foremost wintering area for wild fowl in the county	pNHA
Lough Fea Demesne	Limestone grassland, fen rich in plant life with scattered rock outcrop.	pNHA
Lough Naglack	Limestone grassland, lake habitats support, rich flora, bones of Giant Irish deer found.	pNHA
Lough Smiley	Floating fen community and pockets of raised bog	pNHA
Lough Bawn House Loughs	Scattered pockets of woodland and lakes used by wildfowl	pNHA
Lough Ross	Extensive floating marsh	pNHA
Monalty Lough	Habitat for nesting wildfowl	pNHA
Monmurray Grassland	A small homogeneous site composed almost entirely of improved lowland grassland which is visited by Greenland White-Fronted Geese during winter months. Site has little botanical interest.	pNHA
Muckno Lake	Limestone lake important for water flea and breeding birds, wintering ground fowl, few marginal fens.	pNHA
Mullaghmore Lake (South)	Shallow lake, very good example of colonisation of open water by floating scraw, rich variety of wild fowl.	pNHA
Mullaglassan Lough	Small scraw fringed lake situated in an area of limestone bed rock which yields good quality agricultural land. Bird life is varied and the lake and contains a large population of Greater Spearwort a plant species which is rare in the county.	pNHA
Nafarty Fen	Hollow is filled in completely by vegetation consisting of a mixture of sedges, rushes and reeds with a fringe of willows and planted trees. Used by a moderate number of Snipe in winter as well as by Water Rail.	pNHA
Rafinny Lough	Small oligatropic lake at an altitude of 550ft with peat stained waters. Unusually rich species for an upland lake. Flora exhibits a strong northern element. Floating vegetation very well developed and is an excellent example of a succession sequence typical in small water bodies.	pNHA
Rosefield Lake and Woodland	Calcareous lake, good example of transition from lake shore to alder woodland.	pNHA
Spring and Corcrin Loughs	Acidic grassland community between the lakes.	pNHA
Tassan lough	Small Lough bounded by Silurian outcrops and grassland.	pNHA
Ulster Canal	Several uncommon species of flora.	pNHA
Wrights Wood	Coppiced woodland with ash, willow.	pNHA

6.3: Population and Human Health

The County Development Plan must ensure that the needs of future population growth is planned for and accommodated. Population trends are central to the development plan process. Changes in population, household patterns and spatial distribution form the basis on which decisions on land use, service provision, housing, employment, retail, community and recreational needs are determined.

Population growth has been set for the County by the Border Regional Planning Authority based on targets from the NSS for the State, Border and County as detailed in the table below.

Table 6: Population Targets for the State, Border and County

	2008	2010	2016	2022 (low/high) Range
State	4,422,000	4,584,900	4,997,000	5,375,200 5,523,000
Border Region	492,500	511,000	552,700	595,000 611,400
County		61,320	66,324	71,400

6.3.1 Population Statistics

Provisional population figures for the 2011 census were released by the Central Statistics Office on 30 June 2011.

Population figures for County Monaghan indicated a 6.4% increase between 2002 and 2006. This figure of growth was below the national population increase of 8%. The 2011 census preliminary figures indicate that there has been an 8% increase in the county's population over the period 2006 to 2011, which is comparable with the national average increase of 8.1% over the same period.

Table 7: Population figures in County Monaghan and Nationally 1986-2011

Census	County Population	% Change in Population	National population	% Change in population
1986	52,379	+2.3	3,540,643	+2.8
1991	51,293	-2.1	3,525,719	-0.4
1996	51,313	+0.4	3,626,087	+2.8
2002	52,593	+2.5	3,917,336	+8.0
2006	55,997	+6.4	4,239,848	+8.2
2011	60,495	+8.0	4,581,269	+8.1

An analysis of the population data of the five towns in the county (Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay) indicates that population trends in the county are threefold:

- i. Substantial growth has occurred in rural areas around the main towns
- ii. Population growth in the urban areas has been slight or negative
- iii. Rural areas most removed from the main towns have limited or negative population growth.

6.3.2: Urban Verses Rural Settlement

County Monaghan's population is dispersed throughout the rural areas with less than 30% of the population living in the urban areas as defined by the Central Statistics Office, see table 8 below. This pattern of dispersed population is very strongly established and impacts upon the growth of existing towns and villages as well as undermining the viability of the existing towns and villages in the County.

Table 8: Aggregate Comparison of Town and Rural Areas

County and Year	Aggregate Town Area (Persons)	Aggregate Rural Area (Persons)	% of population in Aggregate Town Area
Monaghan (2002)	14,651	37,942	27.9%
Monaghan (2006)	15,988	40,009	28.6%
State (2006)	2,574,313	1,665,535	60.7

The issue of urban rural balance needs to be addressed carefully in this development plan. It is important to maintain vibrant rural areas whilst at the same time recognising the need for a strong urban structure with sufficient critical mass to attract inward investment and act as engines for economic growth. The preliminary figures obtained from Census 2011 indicates that there is a further weakening of the urban centres with the percentage of people living in the five main towns in County Monaghan falling from 21.3% in 2006 to 20.1% in 2011.

6.3.3: Population Projections and Targets

In Ireland there has been a trend towards increased urbanisation. Based on census figures for County Monaghan between 1996 and 2006, Monaghan Town experienced steady growth, Carrickmacross had limited growth, but Castleblayney and Clones have suffered population decline, with Clones experiencing significant long term population decline. According to the Census 2011 preliminary figures, Monaghan Town continued to grow steadily and Carrickmacross had a modest increase in population over the period 2006 to 2011. The populations of Clones and Castleblayney continued to fall between 2006 and 2011. However, these trends are based on census figures which do not include population growth in areas that are now considered to be part of the established footprint of these towns. This is particularly relevant in the case of Carrickmacross which has experienced significant growth over the last decade. It is considered likely that Carrickmacross will continue to grow at an accelerated rate due to its proximity to the M1 motorway/Eastern Economic Corridor and Dublin.

A base line data report on the county was carried out on behalf of Monaghan County Development Board by Peter Quinn Consultancy Services and was published in 2001. The

report included findings from an analysis of the four main urban areas and their hinterlands carried out by CAAS (Environmental Services) Ltd. CAAS produced eight different projections based on differing assumptions about 'fertility rates', 'mortality rates' and 'net migration'; one model assumed constant figures for fertility, mortality and net migration and showed no change in population. Model seven of that report which assumed falling fertility, slowly falling mortality and migration at 1991-1996 levels, produced the following population projections for the four major settlements in the County:

Table 9: Population Projections for the Major Settlements in Monaghan (1996 - 2021)

Settlement	1996	2001	2006	2011	2016	2021	% change
Monaghan	8,062	7,905	7,902	7,850	7,746	7,542	-6.5
Carrickmacross	4,183	4,357	4,623	4,874	5,107	5,299	26.7
Castleblayney	3,773	3,628	3,525	3,386	3,202	2,956	-21.7
Clones	3,376	3,129	2,917	2,648	2,414	2,081	-38.4
Total of the above	19,394	19,019	18,976	18,794	18,469	17,878	-7.8

While there is no certainty that the above assumptions will prove valid, they are seen as reflecting the 'most likely' outcome in the absence of positive action to produce, or encourage, population growth, or to stimulate inward migration.

The National Spatial Strategy 2002-2020 (NSS) originally detailed that Monaghan Town should achieve a critical mass of at least 15,000 by 2020 if it is to fulfil its role as a hub as defined in the NSS. However, the moderate growth of Monaghan Town determined that it is highly unlikely that this target would be achieved. Consequently, this target was revised downwards in October 2009 to a target population of 9,300 by the year 2022.

The Regional Planning Guidelines for the Border Region 2010-2022 set out population projections for the six counties in the region and their key settlements based on current trends. These Guidelines also set out targets for these counties and key towns based on the updated population targets published by the Department of Environment, Heritage and Local Government in 2009.

These targets project the population of the Border Region to grow to 552,700 in 2016 and 595,000 in 2022. The Regional Planning Guidelines 2010-2022 set out population growth targets for County Monaghan and Monaghan Town as follows:

Table 10: Regional Planning Guidelines Target Figures

	2010	2016	2022
County Monaghan	61,320	66,324	71,400
Monaghan Town	7,600	8,400	9,300

The County Development Plan must apply these population targets and is responsible for the distribution of the remaining balance of population when the target figure for Monaghan Town is subtracted from the target figure for the County.

The assumption underlying these target population figures, that the increase in both the County and Monaghan Town populations will be commensurate with the current population share of the Border Region, may not be necessarily correct given the probable concentration of the increase in County Louth (which is likely to exhibit a strong growth rate more like that of Dublin and the Mid-East). In this scenario, it is possible that the population of Louth could increase to such an extent that it would absorb a significant amount of the regional increase.

Positive action to reverse the anticipated demographic trends may produce different outcomes. It is therefore the aim of this settlement/core strategy to ensure that Monaghan Town will increase population growth and aspire to reach a critical mass of at least 9,300 by 2022 as set out in national policy.

In 2006, the average household size in County Monaghan was 2.5 persons per household, lower than the Border and State averages of 2.81 persons per household. Housing vacancy in County Monaghan was 12.8% in 2006 compared to 21.45% for the Border Region and 15.5% for the State.

Based on 2006 Census figures, the highest proportion of County Monaghan's population is in the 25-29 age bracket representing 15.2% of the overall population. The figures also indicate that County Monaghan has a marginally higher proportion in the 10-19 year age bracket than either the State or Border Region. In common with the Border Region, County Monaghan has a higher proportion of persons aged 70+ which is greater than that of the State.

6.7.2: Land Cover

Land cover includes vegetation, man-made structures and surface water features. The significant land use in the County is agriculture with pastures accounting for approximately 83% of the county's entire land cover. 1.8% of the land cover is comprised of peat bogs in particular along the north western boundary of the county. Water bodies are also visible including Lough Muckno and Lough Eglish. Pockets of Significant Natural Vegetation are located throughout the County, with specific concentrations within the north and north western area of the county and the south western section of the county, along the boundary of County Cavan.

The total area covered and percentage cover for various categories of land use is given in table 11 below.

Table 11: Land Cover within the County

Class Name	Total Area KM²	% Cover
Broad leaved forests	4.41346	0.342394
Complex cultivation patterns	4.34039	0.336725
Coniferous forests	11.7448	0.911152
Construction sites	1.73229	0.13439
Continuous urban fabric	0.26377	0.0204632
Discontinuous urban fabric	16.5391	1.2831
Inland marshes	0.631543	0.0489948
Land principally occupied by agriculture with significant areas of natural vegetation	99.6139	7.728
Mineral extraction sites	1.39911	0.108542
Mixed forests	8.2061	0.636625
Non-irrigated arable land	3.59376	0.278802
Pastures	1069.75	82.9905
Peat bogs	23.5035	1.82339
Road and rail network	0.314261	0.0243802
Sport and leisure facilities	2.43641	0.189016
Transitional woodland scrub	27.1893	2.10933
Water bodies	13.5267	1.04939

The data on land cover is based on the CORINE Land Cover Maps which are maps of the European environmental landscape based on interpretation of satellite images.

Map 3: CORINE Land Cover County Monaghan 2006



Corine Survey 2006 by Land Use

- | | |
|---|---|
| <ul style="list-style-type: none"> ■ Broad-leaved forests ■ Complex cultivation patterns ■ Coniferous forests ■ Construction sites ■ Continuous urban fabric ■ Discontinuous urban fabric ■ Inland marshes ■ Land principally occupied by agriculture with significant areas of natural vegetation ■ Mineral extraction sites ■ Mixed forests | <ul style="list-style-type: none"> ■ Non-irrigated arable land ■ Pastures ■ Peat bogs ■ Road and rail network ■ Sport and leisure facilities ■ Transitional woodland scrub ■ Water bodies |
|---|---|

6.8.3: Surface Water Quality

Degradation of water quality largely occurred between the mid 70's and the late 90's and today a significant number of water bodies' in County Monaghan are now assigned a status of "less than good". Pressures on water quality include urban waste waters, agriculture, unsewered properties (commercial and domestic), landfills and extractive industry, hard surface runoff, siltation and morphological changes (drainage etc). While Monaghan's surface water quality is poor by national standards, factors such as the drumlin topography, soil types and hydrology, contribute to water quality problems. Eutrophication of waters (i.e. excess enrichment by phosphorus) is widespread and while some promising improvements in river phosphate levels are evident, lake recovery from eutrophication will take a considerable time. Excess soil phosphorus may also contribute to eutrophication and nutrient balancing. Nutrient management planning is a key tool in addressing this issue. Despite the improvements in some of the general conditions of river water quality the biology of river and stream habitats remains impacted. Restoration of degraded river catchments is a complex process.

Map 4: Sensitive Surface Waters



Surface water status is determined by its chemical and ecological status and is defined by whichever of these is lower. Ecological status is based on a range of quality elements, representing plants, insects and fish along with supporting water quality, hydrology and morphological conditions being sampled and analysed in rivers, canals, lakes, reservoirs, estuarine waters and coastal waters to allow water bodies to be classified into one of five classes of ecological status – high, good, moderate, poor and bad.

The overall ecological status of water bodies in the Neagh Bann and North Western IRBDs is detailed in tables 12 and 13 below. In addition, table 14 also provides details of lakes in County Monaghan which are designated as having poor or bad ecological status.

Table 12: Ecological Status of Water Bodies – Neagh Bann IRBD

	Rivers & Canals Number (%) Length (%)	Lakes & Reservoir Number (%) Area Km²(%)	Estuaries Number (%) Area Km²(%)	Coastal Number (%) Area Km²(%)
High	0 (0%) 0 (0%)	0 (0%) 0 (0%)	0 (0%) 0 (0%)	0 (0%) 0 (0%)
Good	21 (22%) 101 (13%)	2 (12%) 0.2 (3%)	0 (0%) 0 (0%)	1 (20%) 0 (37%)
Moderate	28 (29%) 259 (33%)	11 (65%) 1.2 (20%)	9 (100%) 39 (100%)	3 (60%) 171 (52%)
Poor	44 (46%) 391 (50%)	3 (17%) 0.7 (12%)		
Bad	2 (2%) 18 (2%)	1 (6%) 4 (64%)		
Yet to be Determined	1 (1%) 8 (1.0%)	0 (0%) 0 (0%)	0 (0%) 0 (0%)	1 (20%) 38 (11%)

The overall ecological status of water bodies in the North Western IRBD is detailed in the table below.

Table 13: Ecological Status of Water Bodies – North Western IRBD

	Rivers & Canals Number (%) Length (%)	Lakes & Reservoir Number (%) Area Km²(%)	Estuaries Number (%) Area Km²(%)	Coastal Number (%) Area Km²(%)
High	98 (14%) 194 (7%)	61 (26%) 12 (7%)	5 (23%) 12 (9%)	6 (26%) 239 (11%)
Good	285 (40%) 910 (32%)	58 (25%) 26 (16%)	1 (5%) 3 (2%)	0 (0%) 0 (0%)
Moderate	162 (23%) 871 (31%)	103 (44%) 122 (73%)	8 (36%) 114 (87%)	7 (30%) 215 (9%)
Poor	154 (22%) 837 (29%)	6 (3%) 3 (2%)		
Bad	5 (1%) 23 (1%)	4 (2%) 3 (2%)		
Yet to be Determined	1 (0.1%) 2.7 (0.1%)	1 (0.4%) 1 (0.1%)	8 (36%) 2 (2%)	10 (44%) 1776 (80%)

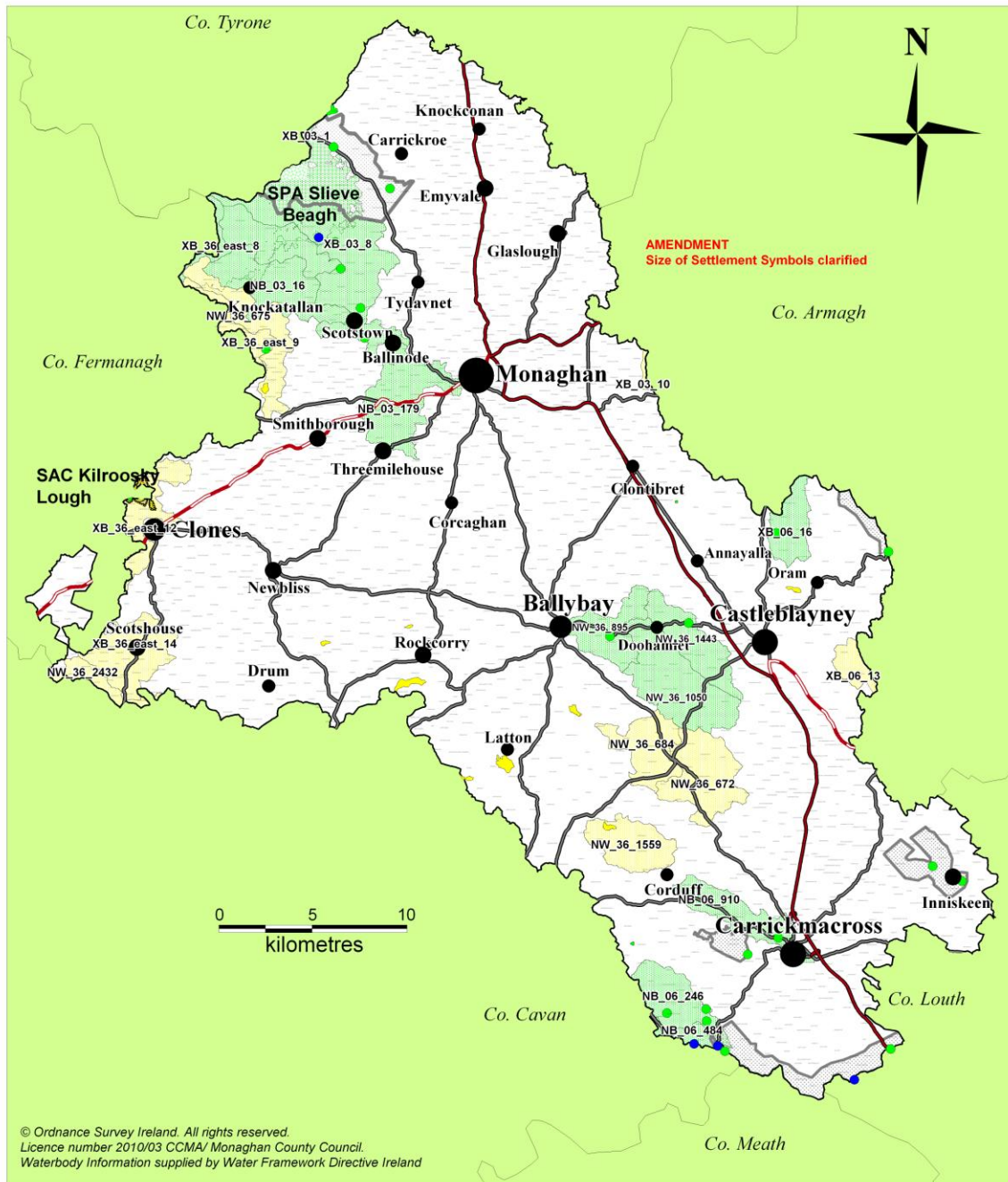
Table 14: WFD Ecological Status: Poor and bad ecological status lakes in County Monaghan

River Basin District	Lake	County	Ecological Status
Neagh Bann	Corcaghan	Monaghan	Poor
Neagh Bann	Emy	Monaghan	Poor
Neagh Bann	Monalty	Monaghan	Poor
Neagh Bann	Muckno	Monaghan	Bad
Neagh Bann	Naglack	Monaghan	Poor
North Western	Drumlona	Monaghan	Poor
North Western	Drumore	Monaghan	Poor
North Western	Egish	Monaghan	Bad
North Western	Inner	Monaghan	Bad

6.8.4: Groundwater Status

An unseen element of water is groundwater, moving beneath us, feeding surface waters and wells. Currently about 30% of the county's public water supply comes from groundwater with new supply sources located at Monaghan, Carrickmacross and Clones towns. Groundwater quality in County Monaghan is generally good, but there are some local contamination problems. The risk of contamination is higher where shallow, free draining soils exist and in areas of karstified limestone as found in the Carrickmacross area. Groundwater requires protection under the River Basin Management Plans. The Geological Survey of Ireland in collaboration with the Council has drawn up the *Groundwater Protection Scheme for County Monaghan*.

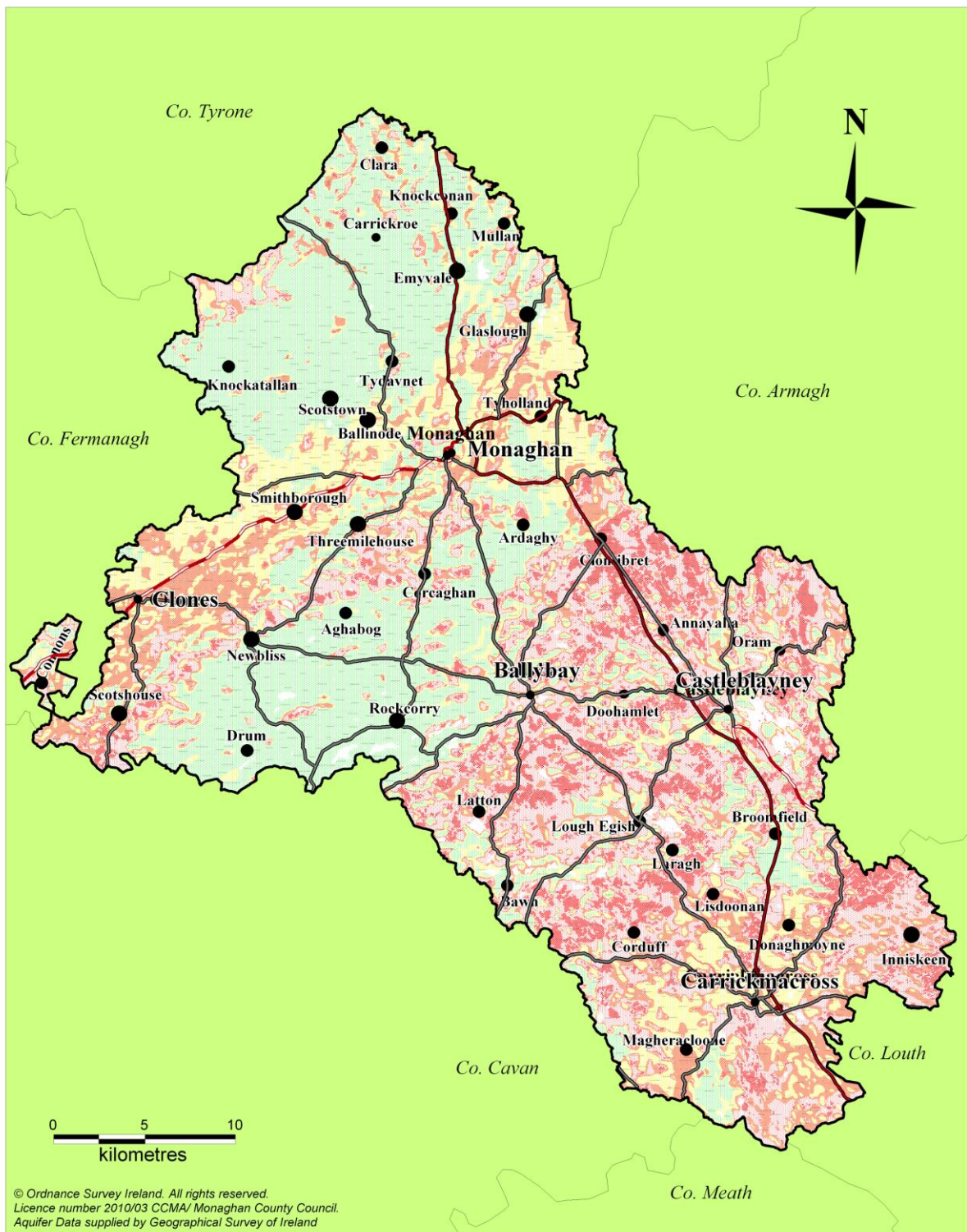
Map 5: Sensitive Ground Waters and Landfill



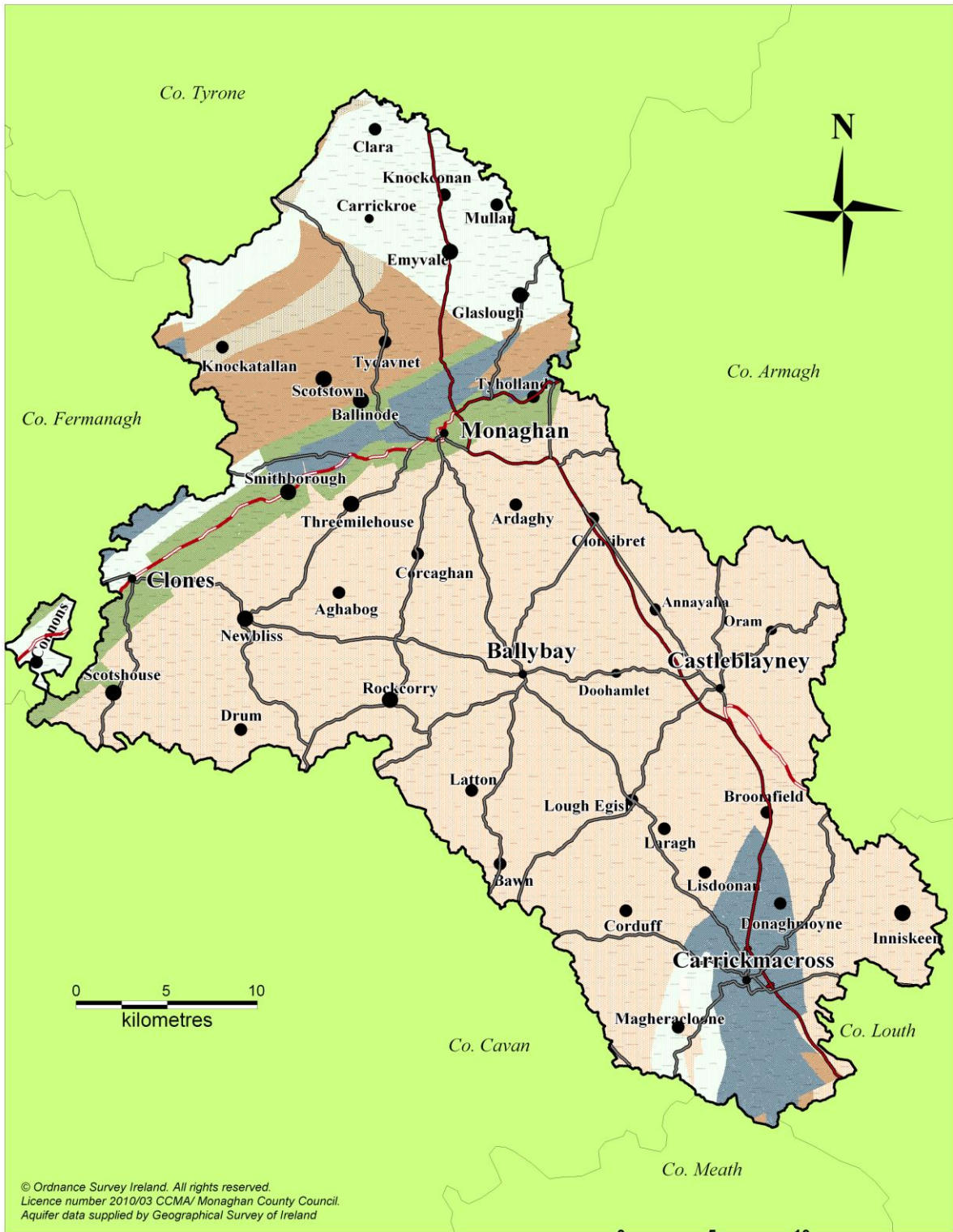
River Waterbody Status	Lake Status	River Q Monitoring Site
Good	Good	High
Moderate	Moderate	Good
	Poor	Sensitive Catchment High/Good Sites



Map 6: Groundwater Vulnerability Map



Map 7: Groundwater Protection Scheme Aquifer



The chemical and quantitative status of each groundwater body was determined based on the criteria set out in the WFD. The classification process also considered the ecological

needs of the relevant rivers and terrestrial ecosystems that depend on contributions from groundwater and the assessment of the impact of pollution on the uses or potential uses of the groundwater body, for example for water supply.

Within the Neagh Bann IRBD, there are 28 groundwater bodies which range in size from less than 1km² to over 1km². The groundwater body status in the Neagh Bann IRBD is classified as follows:

Table 15: Groundwater Body Status, Neagh Bann IRBD

Groundwater	Chemical status No (%)	Quantitative status No (%)	Combined status No (%)
	Area km ² (%)	Area km ² (%)	Area km ² (%)
Good	26 (93%) 1720 (95%)	28 (100%) 1805 (100%)	26 (93%) 1720 (95%)
Poor	2 (7%) 85 (5%)	0 (0%) 0 (0%)	2 (7%) 85 (5%)

There are 72 groundwater bodies in the North Western IRBD which range in size from less than 1km² to over 1440km². The groundwater body status in the North Western IRBD is classified as follows:

Table 16: Groundwater Body Status, North Western IRBD

Groundwater	Chemical status No (%)	Quantitative status No (%)	Combined status No (%)
	Area km ² (%)	Area km ² (%)	Area km ² (%)
Good	72 (100%) 7421 (100%)	72 (100%) 7421 (100%)	72 (100%) 7421 (100%)
Poor	0 (0%) 0 (0%)	0 (0%) 0 (0%)	0 (0%) 0 (0%)

6.8.5: Water Services

Water is a precious resource. The councils' goal is to deliver quality drinking water and effectively treat wastewater consistent with sustainable development. The achievement of this goal necessitates a multi-faceted response encompassing the governing legal, policy and economic framework, the supervisory and monitoring regime, our investment strategy, as well as the combined efforts of many stakeholders who assist in protecting and conserving our valuable water resources. The classification of water as fit for human consumption is based on the European Communities (Drinking Water) (No.2) Regulations, 2007 (S.I. 278 of 2007).

The Environmental Protection Agency (EPA) has responsibility to monitor the performance of local authorities and private water suppliers and report to the Minister for the Environment, Community and Local Government.

The Minister for the Environment, Community and Local Government provides funding to the Council for capital projects/water services infrastructure. Funding is made available through the Water Services Investment Programme and to a lesser extent through the Rural Water Programme.

Monaghan County Council periodically adopts and submits *an Assessment of Needs Report* to the DECLG identifying the county's future public water services priorities. The purpose of

this assessment is to develop an overall strategy to provide water services to the county of Monaghan for the medium to long term and to set out a programme of works to meet the identified water services needs outlined in this report. The DECLG prepares its overall investment strategy and schedules water services capital works projects under successive Water Services Capital Investment Programmes on the basis of the Assessment of Needs Report.

The Water Services Investment Programme aims to ensure that the timing and scale of water services investment facilitates economic and other development, compliance with statutory requirements for drinking water and waste water treatment and the achievement of environmental sustainability objectives.

Table 17: County Monaghan Water Services Investment Programme 2010 -2012

MONAGHAN COUNTY COUNCIL			
Scheme Name	Contract Name	W/S	Estimated Cost €
Contracts at Construction			
Carrickmacross Sewerage Scheme	Contract 2 (Network)	S	15,140,000
Water Conservation Stages 1 & 2 Works	Water Conservation Stages 1 & 2 Works	W	3,992,000
			19,132,000
Contracts to Start			
Carrickmacross Sewerage Scheme	Contract 3 (Treatment Plant Upgrade & Outfall)	S	5,500,000
Carrickmacross Water Supply Scheme	Water Treatment Plant - DBO	W	5,500,000
Castleblaney Sewerage Scheme Phase 1	Wastewater Treatment Plant Upgrade	S	3,927,000
Lough Eglish Regional Water Supply Scheme	Contract 2 (Water Treatment Plant Upgrade)	W	1,300,000
Monaghan Town Sewerage Scheme (H)	Contract 2 (Network)	S	3,910,000
			20,137,000
Water Conservation Stage 3 Works	Watermains Rehabilitation, including lead replacement of public mains (Contract 1)	W	2,500,000
			2,500,000
			41,769,000
Schemes at Planning			
Water Conservation Stage 3 Works		W	

6.8.6: Waste Water Services

Monaghan County Council operates 26 waste water treatment plants in County Monaghan. The wastewater treatment plants vary in size from Monaghan Town Waste Water Treatment Works (WWTW) which has a design capacity of 44,000 population equivalent (p.e.) to plants such Drum WWTW which has a design p.e. of 150.

There are three sensitive water areas located in the county, the River Blackwater, downstream of Monaghan town, Lough Muckno, the discharge point for Castleblaney WWTW and the Proules River, downstream of Carrickmacross. Additional monitoring and emission control together with additional treatment are required for the discharges from the three WWTWs serving Monaghan, Castleblaney and Carrickmacross.

The Minister for the Environment, Community and Local Government provides funding to local authorities for capital projects. The Water Services Programme is essentially divided into two main elements:

1. Water Services Investment Programme (WSIP) and
2. Rural Water Programme (RWP)

The Water Services Investment Programme is a three year rolling plan for the provision of major water and sewerage schemes - schemes with an estimated costing over 1 million euro at present. The Rural Water Programme is a programme for smaller schemes and is devolved to the County Councils.

The Exchequer meets the full capital costs of providing services to domestic customers. The non-domestic sector must pay for services provided to them, that is contribution from the private sector under the polluter Pays principle (PPP).

The current Water Services Investment Programme, 2010-12, provides for major investment in waste water supply infrastructure. The programme considers WWTWs according to the River Basin District (RBD) they are located within, which in the case of County Monaghan are Neagh/Bann RBD and the North Western RBD. The contracts planned during the current programme are:

1. Carrickmacross Sewerage Scheme (Contract 3 - Treatment Plant Upgrade & Outfall) - €5,500,000
2. Castleblayney Sewerage Scheme Phase 1 (Wastewater Treatment Plant Upgrade) - €3,927,000
3. Monaghan Town Sewerage Scheme (Contract 2 - Network) - €3,910,000

The contract for Carrickmacross main drainage will complete in 2012 at cost of almost €20m, consisting of new foul water collection system and associated pumping stations, and decommission of all pumping stations.

In 2011 two Serviced Land Initiatives (SLI) for Monaghan town to extend the existing waste water collection systems around the town were completed. The first on the Old Armagh Road consisting of large pumping station and collection pipework, and the second consisting of three pumping stations in an area north of town namely Coolshannagh-Emyvale road area.

Many of the 500-2000PE sized WWTP were upgraded in 2000-2010 including Emyvale, Scotstown, Ballinode, Threemilehouse, Inniskeen, Glaslough Rockcorry and Newbliss. Current plans identify the waste water infrastructural needs in each town/village and the Council's Water Services Section will commence a Programme of Works in 2012-2015, to meet the identified needs.

It is also planned to construct a new leachate treatment facility at Scotch Corner landfill, consisting of an Integrated Constructed Wetland (ICW). ICWs should be promoted in small towns and villages, where ample land is available for treatment, keeping running costs/energy requirement to a minimum. ICWs should also be considered for enterprises located in rural areas.

In addition to these planned proposals, Monaghan Local Authorities continue to work in partnership with developers to provide or improve waste water infrastructure in small rural villages and settlements.

One of the main constraints to development is an adequate WWTW facility and adequate water supply servicing the area. Development should be in proximity of well serviced areas with reference to WWTW, especially those with spare capacity as noted in Table 18 below. Development should be limited or restricted in those areas where capacity is not available, or where funding is unavailable to increase the size of the relevant facility.

Table 18: Assessment of Waste Water Treatment Works Capacity in Settlements

Town/Village	Existing Design P.E.	Current Loading P.E.	Treatment Type	Proposals
Monaghan	43,833	16,533 18,500	Secondary	New main pumping station & collection pipeline in flooding area Subject to EPA pending discharge licence conditions, possible enhanced biological treatment facility and/or new outfall discharge pipeline to Blackwater 'sensitive' receiving waters. New Old Cross Square pumping station and new section of pipework collection system.
Carrickmacross	12,150	12,000 12,143	Secondary	New storm holding tank, New inlet and outlet pumping station, new 3.35km long outfall pipeline, new inlet works
Castleblayney	12,960	5,692	Secondary	Improvement works to meet EPA granted Discharge Licence (DL) Sludge handling and storage improvements and additional aerator.
Clones	4,500	3,100	Secondary	Renew Biofilter, provide storm tank, new inlet works & pumps New final clarifier
Ballybay	7,283	3,135	Secondary	Improvement works to meet EPA granted pending Discharge Licence (DL)
Ballinode	1,000	487 462	Secondary	No scheduled improvement. New pipework collection and pumping station to unserved area.
Scotstown	1,000	520	Secondary	No scheduled improvement. New pipework collection and pumping station to unserved area.
Emyvale	2,000	1045	Secondary	No scheduled improvement
Tydavnet	350	100	Tertiary	Improvement works to meet EPA DL. No scheduled improvement
Glaslough	1,800	720	Tertiary	No scheduled improvement
Knockatallon	180	150	Secondary	Bioremediation of waste water through short rotation coppice (SRC) Willow plantation. Commenced in 2012, to be completed in 2013.

Town/Village	Existing Design P.E.	Current Loading P.E.	Treatment Type	Proposals
Carrickroe	150	80	Secondary	Improvement works to meet EPA-granted Discharge Licence (DL) No scheduled improvement
Tyholland	150	143	Secondary	Improvement works to meet EPA-granted Discharge Licence (DL) Addition of aeration and settlement facility to increase capacity by 600 P.E.
Knockaconny	1000	200 220	Secondary	Improvement works to meet EPA granted pending Discharge Licence (DL)
Clontibret	150	225	Secondary	Bioremediation of waste water through short rotation coppice (SRC) Willow plantation. Commenced in 2012, to be completed in 2013.
Annayalla	600	175 200	Secondary	No scheduled improvement
Oram	150	93 195	Secondary	Improvement works to meet EPA-granted Discharge Licence (DL) pending Certificate of Authorisation (COA) grant from EPA.
Inniskeen	1750	979	Secondary	No scheduled improvement
Magheracloone	160	160 80	Secondary	Improvement works to meet EPA-granted Discharge Licence (DL) pending Certificate of Authorisation (COA) grant from EPA.
Doohamlet	600	255 300	Secondary	No scheduled improvement
Rockcorry	1000	550	Secondary	No scheduled improvement
Newbliss	1000	650	Secondary	No scheduled improvement
Scotshouse	600	353 330	Secondary Tertiary	No scheduled improvement
Drum	150	78	Secondary	No scheduled improvement
Smithborough	750	590	Secondary	Improvement works to meet EPA granted pending Discharge Licence (DL)
Threemilehouse	250	133	Secondary	Improvement works to meet EPA-granted Discharge Licence (DL) pending Certificate of Authorisation (COA) grant from EPA.

The following information regarding waste water in County Monaghan has been derived from the EPA document entitled “Urban Waste Water Discharges in Ireland for Population Equivalents Greater than 500 Persons - A Report for the Years 2006 and 2007” which was published in 2009. The full report can be viewed at www.epa.ie

Table 19 on the ~~following page~~ below provides a summary of the compliance of Monaghan Local Authority with regard to the requirements of the Urban Waste Water Treatment Directive.

Table 19: Monaghan Local Authority – Compliance with Urban Waste Water Treatment Directive

Total Number of Agglomerations greater than 500 p.e	Number of Agglomerations with no treatment or only basic treatment	Number of Agglomerations with secondary treatment that failed Standards/Guidance Values	Total p.e
16	0	11(69%)	74,215

6.8.7: Phosphorous Monitoring at Sensitive Areas

Limits for total phosphorus and total nitrogen apply for discharges from waste water treatment plants to designated sensitive areas. The table below presents the results of phosphorus monitoring during 2007 at plants greater than 10,000 p.e. discharging to sensitive areas as set out in the 2001 Regulations and the relevant catchment areas of such sensitive areas.

Table 20: Phosphorous Monitoring for 2007

Treatment Plant	No of Samples Total P	Annual Mean Total P m/g/l
Carrickmacross	11	1.14
Castleblayney	12	0.77
Monaghan	12	1.33

Whilst the above table indicates that plants at Carrickmacross returned 11 samples (shortfall of 1), the remaining samples submitted to the EPA met the required standards in respect to total phosphorus and total nitrogen.

6.9.2: Air Quality

The EPA document entitled Air Quality in Ireland 2010 indicates that overall, air quality in Ireland continues to be of good quality and remains the best in Europe. In 2010, measured values of sulphur dioxide (SO₂), nitrogen dioxide (NO₂), carbon monoxide (CO), Ozone (O₃), particulate matter (PM₁₀ and PM_{2.5}), heavy metals, benzene and polycyclic aromatic hydrocarbons (PAH) were all below limit. The quality of Air in Ireland is generally of a high standard across the country due to prevailing Atlantic airflows, relatively few large cities and

the lack of widespread heavy industries. However, levels of particulate matter and nitrogen dioxide remain of concern. Traffic is the primary source of nitrogen dioxide and is also one of the main sources of particulate matter. EU legislation on air quality requires that member states divide their territory into zones for the assessment and management of air quality. The zones were amended in the 2009 Regulations (DEHLG, 2009) to take account of population changes and updated assessment of air quality. County Monaghan is located within Zone D. It is noted that in Zone D domestic solid fuel emissions are a more significant problem than traffic emissions.

Increases in the use of catalytic converters, cleaner fuels, etc has generally helped to reduce pollution omitted from motor vehicles. However, this reduction is probably being offset by the increase in the number of cars circulating. Increases in the number of cars coupled with the increases in the volume and incidences of traffic congestion may lead to an increase in air (and noise) pollution.

Traffic growth in Co. Monaghan increased significantly over the period 2000 to 2008. Table 21 below details the number of new vehicles licensed in the county and the state every year.

Table 21: New Vehicles Taxed Nationally and in County Monaghan.

Year	No of new vehicles taxed in Co. Monaghan	% Increase	No of new vehicles taxed nationally	% Increase
2000	2,938	+ 33	274,990	+ 29
2001	2,023	- 39	207,441	- 25
2002	2,107	+ 4	193,743	- 7
2003	1,920	- 9	188,109	- 3
2004	2,019	+ 5	195,507	+ 4
2005	2,381	+ 18	219,284	+ 12
2006	2,726	+ 14	233,727	+ 7
2007	2,705	- 1	246,446	+ 5
2008	2,071	- 23	194,817	- 21
2009	719	- 65	73,125	- 62
2010	1,138	+ 58	103,076	+ 41

Although the number of new vehicles taxed every year fluctuated over the period 2000 to 2008, there was a net increase in numbers. This combined with improvements in the road network resulted in more frequent traffic movements and greater distances travelled between work and home. The average daily traffic flow on the N2 was projected to rise by 49% by 2019 from the current 7,395 vehicles per day.

The increase in car ownership and the mobility it offers has impacted upon the pattern of development in the county. Carrickmacross town and the south of the county has experienced an increase in population, and demand for one-off housing is greatest in this area. Carrickmacross is located on the edge of the Greater Dublin commuter belt and is now only a 1 hour journey from Dublin Airport.

The completion of the Dundalk Western Bypass on the M1 motorway, the Carrickmacross by pass, the Castleblayney by pass and the Monaghan Town by pass have improved access to Dublin and the eastern sea board from the county.

Car ownership is essential to almost everyone living in rural areas of the county. One of the effects of a car-based lifestyle is a significant increase in traffic levels. Whilst 16% of the national population travel more than 5 miles to work, school or college, 30% of Monaghan's population travel more than 5 miles daily. This is reflected in traffic congestion leading into the main towns and a need for increased car parking provision, relief roads, traffic management facilities and safety measures.

Increased congestion adds to business costs and impacts on the quality of life of car drivers, pedestrians and residents.

6.9.3: Water Implications

Future projections indicate that climate change will have significant impacts on river flows and global water resources. In particular, it is the extremes – floods and low flows – that will be most affected. It is also likely that rainfall and river flows will become much more variable than at present. This will have major implications for water supply, irrigation, commercial and industrial development, human health and environmental conditions. New areas will become vulnerable to flooding, while existing flood-prone areas will be affected more often. Decreases in summer rainfall, coupled with a rise in rates of evaporation, will mean that low flows become more persistent. This will lead to problems of water supply.

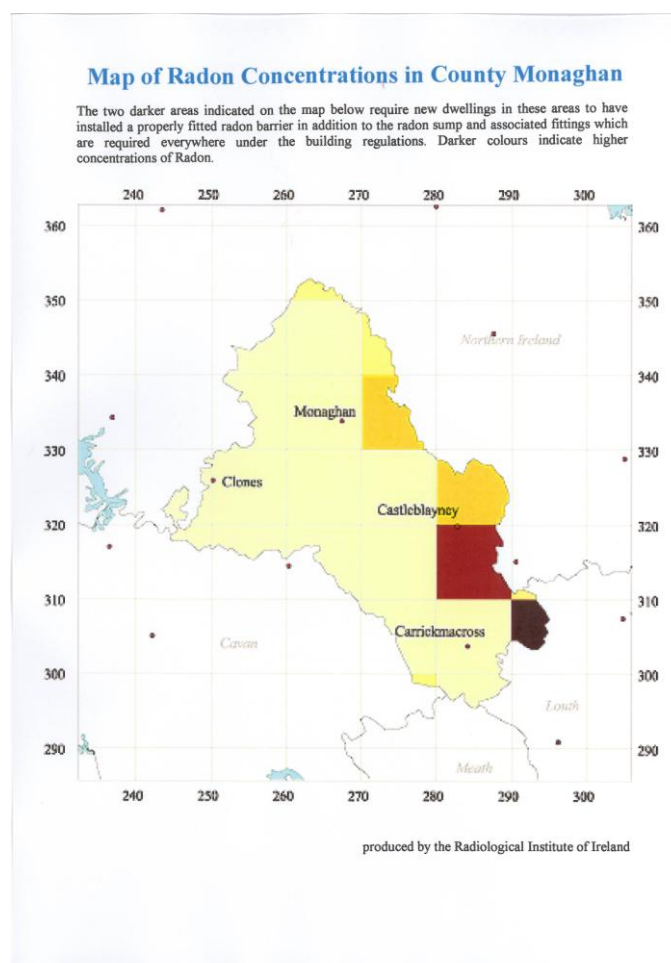
The impacts of climate change are projected to increase in the coming decades. Research commissioned by the EPA has demonstrated that action is required on a national basis to prepare for adverse impacts in areas such as flooding, water management during dry spells, sea-level rise and coastal erosion.

6.9.4: Radon

Over recent years radon gas has been identified as being a hazard to public health. Radon is a radioactive gas which is naturally produced in the ground from the uranium present in small quantities in rocks and soils. The Radiological Protection Institute of Ireland (RPII) has undertaken a survey of radon in dwellings throughout the country. Approximately 11,500 houses were surveyed nationally and the results indicated that approximately 7% of dwellings have radon concentrations in excess of the maximum acceptable limit. Further details on radon can be found on the RPII website www.rpii.ie.

Map 8 on the following page indicates that whilst the majority of County Monaghan does not experience issues of radon, the area to the south of Castleblayney and the east of Carrickmacross do experience elevated radon levels.

Map 8: Radon Concentrations in County Monaghan



6.11.2: Record of Protected Structures

The principle mechanism for the statutory protection of the architectural heritage is through inclusion of buildings on the Record of Protected Structures (RPS). The RPS gives positive recognition of the structures of importance, provides for their protection and gives potential access to conservation grant schemes on foot of the provisions of Part IV of the Planning and Development Act 2000. The RPS may be amended by the addition or deletion of entries independently of the development plan review process.

The National Inventory of Architectural Heritage (NIAH) Monaghan County Survey shall be completed in 2012. It is anticipated that new structures will be added to the RPS during the lifetime of the plan to reflect the new survey work undertaken.

Currently there are 646 protected structures on the five Registers of Protected Structures in County Monaghan, refer to Table 22 on following page, and the continued conservation of these buildings and their settings is of considerable importance in retaining the quality of the built environment.

Table 22: Record of Protected Structures – Monaghan Planning Authorities

Area	Privately Owned	Publicly Owned	Total
Monaghan County Council	291	34	324
Carrickmacross Town Council	74	1	75
Monaghan Town Council	132	19	151
Castleblayney Town Council	42	9	51
Clones Town Council	43	2	45
Total	582	65	646

6.11.3: Architectural Conservation Areas (ACAs)

An Architectural Conservation Area (ACA) is a place, area, group of structures or townscape which is of special architectural, historical, archaeological, artistic, cultural, scientific, social or technical interest or contributes to the appreciation of a protected structure.

The main consequence of an ACA designation is the control of inappropriate development for the purpose of preserving and enhancing the character of the area concerned. A number of ACAs are currently designated in the towns of Monaghan, Carrickmacross and Clones, details of which are detailed in the table below.

Table 23: Existing Architectural Conservation Areas

Town	Description	Feature of Interest
Monaghan	Market Street including numbers 18-26	-----
Monaghan	Hill Street including numbers 12-20	-----
Monaghan	Mill Street including numbers 1, 2, 14, 15, 16, 17, 18,19,20	-----
Monaghan	North Road including numbers 17, 18, 21, 22	-----
Monaghan	Dublin Street including numbers 15, 31, 32, 33, 34, 35, 36, 37, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 58, 59, 63	-----
Monaghan	Park Street including numbers 6-24	-----
Monaghan	Glaslough Street including numbers 3, 4, 5, 12, 77, 84, 85, 86, 87, 94, 95, 96, 97, 98	-----
Monaghan	The Diamond	Important urban space and focal area, scale and massing of buildings produce a strong sense of enclosure.
Monaghan	Church Square	Important urban space and focal area. Fine spatial relationship of buildings to St. Patrick's Church and the Courthouse.
Monaghan	Belgium Park and Square	Stone Built Houses
Monaghan	Plantation Terrace	Plantation Road
Carrickmacross	Main Street	Important Urban Space
Carrickmacross	Courthouse Square	Fine Urban Space
Carrickmacross	Market Square	Facades, important Urban Space
Carrickmacross	St. Joseph's Terrace	Bath Estate Stone Cottages
Carrickmacross	Farney Street	Facades
Carrickmacross	Weymouth Cottages	Important street façade
Clones	McCurtain Street from Diamond to Ball Alley	Fine 19 th Century Streetscape
Clones	Diamond	Facades
Clones	Ball Alley	Location of a number of archaeological monuments

~~It is also proposed to designate additional ACAs in the towns of Castleblayney and Ballybay and the villages of Glaslough, Inniskeen and Rockcorry during the life of the plan.~~

6.11.6: National Monuments

Some monuments on the RMP are considered to be of national importance due to their historical, architectural, traditional, artistic or archaeological interest and must be preserved. These are known as National Monuments. A detailed procedure must be followed in order to get Ministerial consent for any proposed works to these monuments. Detailed information

on national monuments in County Monaghan can be obtained through the National Monuments Service. The table on the following page details National Monuments in state care or with preservation orders in the County.

Table 24: National Monuments in state care or with preservation orders

National Monument	Monument name	Description	Townland
444	Clones Round Tower	Round Tower	Crossmoyle, Clones
442	Clones High Cross	High Cross	Crossmoyle, Clones
444	Wee Abbey, Clones	Church	Crossmoyle, Clones
382	Mannan Castle	Motte & Bailey	Donaghmoyne
208	Inishkeen Globe Round Tower	Round Tower	Inniskeen
564	Mullyash	Cairn	Mullyash, Tavanaskea
367	Cairnbaine	Court Tomb	Tiredigan

National Monument Ref	Status	Site Type	Townland	RMP No.
111	Ownership	Round Tower	Crossmoyle, Clones	MO011/01002
111	Ownership	Church	Crossmoyle, Clones	MO011-01001
112	Ownership	High Cross	Crossmoyle, Clones	MO011-01005
382	Ownership	Mannan Castle (Motte & Bailey)	Donaghmoyne	MO028-118
200	Owenship	Round Tower	Iniskeen	MO029-031002
564	Guardianship	Cairn	Mullyash, Tavanaskea	MO015-007
367	Ownership	Cairnbaine Court Tomb	Tiredigan	MO012-041
4/90	Preservation Order	Black Pigs Dyke (Linear Earthwork)	Annagheane	MO016-012
7/84	Preservation Order	Ringfort	Doora	MO027-006
1/82	Preservation Order	Crannog	Loughoony	MO012-006
3/87	Preservation Order	Ringfort	Ture	MO017-030
39/74	Preservation Order	Standing Stone	Miskish More	MO0290913

6.11.10: Landscape and Visual Impacts

The unique character of the Monaghan landscape is its intimate scale, comprising drumlins, interspersed with lakes, trees and woodlands. This landscape of small enclosed fields with foreshortened horizons is different and indeed unique from that of the more open landscape found in many other parts of Ireland. It is a landscape which has evolved over time, its landform being moulded by glaciation and the Landcover pattern being shaped largely by agricultural practices.

Table 25 on the following page details the landscapes designated in the current Monaghan County Development Plan 2007-2013.

Table 25: Existing Designated Landscapes

Type of Designation	Location
Areas of Primary Amenity Value	Sliabh Beagh and Bragan Mountains Areas Lough Muckno and Environs
Areas of Secondary Amenity Value	Emy Lough and Environs Blackwater River Valley Mountain Water River Valley Mullyash Mountain Ulster Canal and Environs Rossmore Forest Park and Environs Castleshane Woods and Environs Billy Fox Memorial Park and Environs Annaghnakerrig Lake, Woodlands and Environs Dartry Demesne and Environs Dromore River and lake system including White Lake and Bairds Shore Lough Major and Environs Hollywood Lake Lisanisk Lake Lough Naglack Rahans Lake
Scenic Drives/Views/Prospects	Scenic views along Emy Lough Scenic views of open countryside from Bragan Mountain View of St. Macartens Cathedral Monaghan from Berry Brae View from Castleshane Brae View northwards at Tullybuck Scenic drive and views of open countryside from Mullyash Scenic drive along Lough Muckno Distant views of Lough Muckno and Slieve Gullion Views of Slieve Gullion at Taplagh, Broomfield Scenic views of Lough Egish Scenic drive at Beagh, Shantonagh and Corlat Views of Lough Bawn and Co. Cavan Scenic drive at Tattybrack

6.12: Inter-Relationship between Environmental Topics

The full range of likely environmental impacts will be addressed to include secondary, cumulative, synergistic, medium and long term, permanent and temporary, positive and negative.

Environmental issues cannot be considered in isolation from each other and so the inter-relationships between the various factors will be addressed in the Environmental Report. It is however, considered that the inter-relationships, as indicated in Table 26 ~~on the following~~ **page below**, may be relevant.

Table 26: Potential Inter-Relationships between SEA Topics

Biodiversity, Flora and Fauna	✓								
Population/ Human Health	✓	✓							
Soil	✓	✓	✓						
Water	✓	✓	✓	✓					
Air	✓	✓	✓	X	✓				
Climate	✓	✓	✓	✓	✓	✓			
Material Assets	✓	✓	✓	✓	X	✓	✓		
Cultural Heritage	X	✓	X	✓	X	X	✓	✓	
Landscape	✓	✓	✓	✓	X	X	✓	✓	✓
	Biodiversity, Flora and Fauna	Population/ Human Health	Soil	Water	Air	Climate	Material Assets	Cultural Heritage	Landscape

✓ = Interrelationship Anticipated

X= No relationship Anticipated

7.0: Significant Environmental Pressures

New development brings with it a need for supporting infrastructure. Key environmental issues that arise include water supply, treatment of waste water and transportation. An increase in population is likely to lead to an increase in car use which can in turn lead to a negative effect on air quality and human health.

The more significant environmental issues identified during the Scoping Period include settlement patterns, water quality, biodiversity, landscape and cultural heritage, built heritage, transportation, agriculture, tourism, afforestation, energy resources, greenhouse gas emissions, climate change, flood risk and waste management. Achieving a good quality of life for the people who live, work or visit the region is considered to be a key objective of the SEA process.

Securing economic development and social equity together with preserving and enhancing the urban and rural character of the County are closely associated with environmental issues.

To date air quality and noise pollution have not been raised as significant environmental issues, however they have been scoped-in, due to the potential indirect environmental impacts.

A list of the significant environmental issues which are considered necessary to be “scoped in” is set out in the table on the following page. The environmental impacts mentioned under the various topics listed in the table can often act across a number of topic areas. The impacts can vary in scale and extent some being short term and reversible others more long term and potentially permanent. It should also be noted that whereas individual impacts may be minor, the cumulative impacts, particularly when viewed over the longer term can be significant.

Table 27: Scoping of SEA Topics

SEA Topics	Scoped In	Indicative list of environmental impacts that need to be considered, either directly or indirectly, in the Environmental Report.
Biodiversity, Fauna and Flora	In	Impacts on protected areas: European Sites (SACs/SPAs) Impacts on National Protected Sites (NHAs and pNHAs) Impacts on flora and fauna and habitats including floodplains, wetlands, watercourses, peatlands and woodlands. Impacts of invasive species Interaction with Habitats Directive (Articles 6 and 10)
Population	In	Impacts of change of population profile. Impacts of change in settlement patterns and car use. Road Safety. Increased demand for waste water treatment systems and waste management facilities. Impacts on environmentally sensitive areas. Efficient use of infrastructural and community services.
Human Health	In	Impacts on water quality including drinking water. Air and noise pollution. Impacts of flooding.
Soil	In	Impacts of land use activities including urban and rural development for example wind farms, waste disposal, afforestation, recreation and agricultural activities.
Water	In	Impacts of urban and rural development and activities on water quality including drinking water. Impacts of urban and rural development on waste water and surface water disposal. Impacts of agricultural activity. Impacts of water recreational activities.
Air	In	Impacts of air pollution associated with transport emissions. Impacts of air pollution associated with industrial emissions. Impacts of air pollution associated with domestic emissions.
Climatic Factors	In	Impacts of greenhouse gas emissions. Impacts of flooding. Impacts of energy generation and consumption. Need for energy conservation.
Cultural heritage including Architectural and Archaeological	In	Impacts on items and features of heritage value including items of landscape, architectural, archaeological and historical importance.
Landscape	In	Impacts on visually sensitive areas including designated landscapes.
Interrelationship between the above topics	In	Cumulative impacts and interaction of above mentioned items. Impacts and interactions will vary in extent and nature.

7.9: Summary of Main Environmental Pressures within County Monaghan

The table on the following page presents a summary of the main environmental pressures within the County. The items presented in the table are not exhaustive

Table 28: Summary of Environmental Pressures within the County

Topic	Environmental Issue/Pressures
Biodiversity, Fauna and Flora	Increases in population, their associated activities and settlement patterns increase pressures on biodiversity. Certain developments and activities associated with agricultural activities, forestry, urban developments, windfarms, quarries, tourism, peat extraction, infrastructural works including road works, water abstraction, waste water disposal that are located within or close to ecologically sensitive sites. Invasive non-native plants such as Rhododendron which is apparent on Sliabh Beagh as well as non native animals such as Fallow Deer. Both non native plant and animal species pose a threat to biodiversity. County Monaghan contains 1 SAC, 1 SPA, 1 NHA and 39 pNHAs – these sites are sensitive to certain development works and activities.
Population and Human Health	Increases in population, their activities and settlement patterns have the potential to place increased pressure on a variety of areas including water quality, landscape, cultural heritage and air. In particular increased pressure on water quality arising from pollution can have a significant impact on human health. Higher than normal levels of radon in buildings in the south of the county as well as issues surrounding road safety also have the potential to impact upon the human health of the county.
Soil	Certain development types and associated infrastructure including urban and rural development, windfarms, waste disposal, afforestation, recreation and agricultural activities can place significant pressure on the soils of the County. Climate change, in particular, changes in precipitation arising from global warming may also have a significant impact on slope stability which could in turn impact upon soils and water quality.
Water	Development and activities can often impact on water quality including groundwater and drinking water. Waste water disposal, surface water disposal, landfills, quarries, illegal dumping, agricultural activities, water recreational activities and afforestation can have significant impacts on water quality. Some of the most significant risks to water quality include excessive inputs of nutrients, namely phosphorous and nitrogen.
Air and Noise	With regard to air and noise, no significant impacts have been identified within the County. However emissions from traffic and industrial units are associated with air and noise pollution.

Climatic Factors	Increased greenhouse gas emissions have been linked with climate change resulting in increases in the intensity and frequency of flooding. Reliance on the car as a result of the dispersed settlement pattern and lack of adequate public transport facilities will also have a contribution on climatic factors through increases in greenhouse gases.
Material Assets	Material assets comprise a wide range of natural and man made assets which include infrastructural services, cultural heritage, quarries, water resources. Developments and activities can often impact on these assets, some of which have been referred to herein. Although vacancy rates in the County are not a major concern, they do represent an underutilised resource and if left idle can deteriorate and detract from the character of the surrounding area.
Cultural heritage, including architectural and archaeological	Pressures can arise from certain developments and activities on or near sites of heritage value. The visual amenities and character of urban and rural areas and items of architectural, archaeological and historical importance may be placed under pressure by such works. In terms of cultural heritage it is noted that there are circumstances where development works can often have a positive impact.
Landscape	Development and activities can impact on visually sensitive areas, for example designated landscapes.
Interrelationship between the above topics	Cumulative impacts and interaction of the above mentioned issues can give rise to increased pressures on the environment. The impacts and interactions will obviously vary in extent and nature. In particular issues with respect to water quality, climate change and one off housing in the countryside traverses a number of environmental topic areas. Population increases and changes in settlement patterns can impact on a wide range of the topics mentioned above.

The following is a summary of certain items where particular environmental pressures have been identified in the County:

- Proliferation of one off housing in the countryside.
- Urban sprawl especially in areas designated as “Rural Areas Under Strong Urban Influence”.
- Public waste water treatment plants are at full capacity in some of the towns within the County thus heightening the risk of surface water pollution.
- Intensive agricultural activities, for example run off from excessive slurry spreading on areas characterised by poor soils and inadequate storage of effluent.
- A number of diesel laundering premises located throughout the county.
- Incidences of illegal dumping of wastes.
- Draining/infilling of wetlands.
- Depletion of water resources.
- Cumulative impact of development on habitats for example loss of hedgerows, wetlands.
- Environmental scarring resulting from new roads.
- Environmental scarring resulting from mineral extraction.

10.0: Monitoring, Environmental Objectives, Indicators and Targets

The environmental indicators and targets presented below will be used to monitor the predicted environmental impacts of implementing the Plan.

Monitoring will be based around the objectives, indicators and targets outlined below and will commence at an early stage to help identify unforeseen adverse effects and the undertaking of appropriate remedial action.

~~The list of environmental objectives is indicated in table 28 below and is based upon Table 4B of the DoEHLG Guidelines (2004)~~

10.1: Responsibilities

Monaghan Local Authorities will be responsible for monitoring the environmental effects of the implementation of the Monaghan County Development Plan 2013-2019 (Incorporating the Development Plans for the Towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay). However, there are a number of state bodies who have monitoring responsibilities, e.g. the Environmental Protection Agency, the National Parks and Wildlife Service, and the Central Statistics Office. Information from such authorities will need to be acquired to carry out a comprehensive monitoring programme of the Monaghan County Development Plan 2013-2019.

10.2: Indicators, Targets and Thresholds

Monitoring is based around the indicators which were chosen earlier in the process. These indicators allow quantitative measures of trends and progress over time relating to the SEOs used in the evaluation. Focus will be given to indicators which are relevant to the likely significant environmental effects of implementing the Plan and existing monitoring arrangements will be used, where possible, in order to monitor the selected indicators. Each indicator to be monitored will be accompanied by the relevant target(s) which were identified and/or developed depending on the availability of legislation and/or guidelines. Table 29 outlines the objectives for each environmental parameter together with their associated targets, indicators and the responsible authority.

10.3 Frequency of Reporting

Section 15(2) of the Planning and Development Act, 2000 (as amended) states that the Manager shall, not later than two years after the making of a development plan, give a progress report to the Elected Members regarding the implementation of the Plan. The Statutory Manager's Report on Progress in achieving the objectives of the Development Plan 'shall include information in relation to the progress on and the results of monitoring the significant environmental effects of implementation of the development plan'. It is expected that these reports will be issued to the designated Environmental Authorities and made available on the County Council website.

Table 29: Environmental Objectives, Indicators and Targets

Objective	Target	Indicator	Responsible Authority
Biodiversity, Flora and Fauna			
BIO1 – Ensure compliance with the Habitats Directive by protecting all Natura 2000 sites and habitats of species within the county	<p>Maintenance of favourable conservation status of the qualifying interests of all Natura 2000 sites.</p> <p>Control of inappropriate development in and within 15km of Natura 2000 sites.</p> <p>No loss of protected habits and species during the lifetime of the plan.</p> <p>Submission of Natura Impact Statements and Natura Impact Reports where necessary.</p>	<p>Number and nature of developments permitted in or within 15km of Natura 2000 sites.</p> <p>Percentage of habitats and species lost within designated sites.</p> <p>Number of Natura Impact Statements and Natura Impact Reports submitted.</p>	<p>Monaghan County Council</p> <p>National Parks and Wildlife Service</p>
BIO2- Conserve and enhance the diversity of habitats and protected species and promote the sustainable management of these areas.	<p>No loss/reduction of hedgerows.</p> <p>No loss of protected habits and species during the lifetime of the plan.</p>	<p>Hedgerow Survey.</p> <p>Loss of hedgerows as a result of sightlines to be replaced with additional planting.</p> <p>Number of additional areas throughout the county designated as a result of biodiversity importance to protect ecological integrity.</p>	Monaghan County Council
BIO3 – Ensure compliance with Article 10 of the Habitats Directive with regard to ecological corridors and contiguous areas of habitats	<p>No ecological networks to be lost/reduced during the lifetime of the plan.</p> <p>Promote the retention of wildlife features such as hedgerows, riparian corridors, wetlands and other semi natural features.</p>	<p>Changes in land cover – CORINE</p> <p>Percentage loss of wildlife features.</p>	Monaghan County Council
Population			
POP1 – Facilitate a good quality of life for the County’s residents based on high quality living and working environments.	<p>Development of additional green spaces and amenities for the public.</p> <p>Increase in population over the lifetime of the plan.</p> <p>Increase in persons in employment.</p> <p>Retain insurance bonds to ensure completion of housing developments.</p>	<p>Increase/decrease in green spaces and amenities throughout the lifetime of the plan.</p> <p>Percentage increase/decrease in population living in the county through the lifetime of the plan.</p> <p>Percentage increase/decrease in persons in employment through the lifetime of the plan.</p>	<p>Monaghan County Council</p> <p>Central Statistics Office</p>

		Number of housing developments taken in charge by Monaghan County Council.	
POP2 –Facilitate more sustainable travel patterns.	<p>Reduce the number of private vehicles on the road.</p> <p>Increase in public transport use.</p> <p>Increase in the number of cycle routes in the county.</p> <p>Increase in the number of looped walks, and long and medium distance walking routes.</p>	<p>Percentage increase/decrease in car ownership.</p> <p>Number of population travelling to work/school on public transport.</p> <p>Number of cycle routes developed in the county through the lifetime of the plan.</p> <p>Number of looped walks and long and medium distance walking routes developed in the county through the lifetime of the plan.</p>	<p>Central Statistics Office.</p> <p>National Roads Authority.</p> <p>Monaghan County Council</p>
Human Health			
HH1: Protect human health from hazards/nuisances arising from traffic and incompatible land uses (e.g. quarrying, industrial activities).	<p>No spatial concentrations of health problems arising from environmental factors.</p> <p>Investigate and identify unauthorised sites which are considered a hazard/nuisance to human health.</p>	<p>Occurrences of a spatially concentrated deterioration of human health.</p> <p>Number of enforcement cases in respect of sites considered to be a hazard/nuisance to human health investigated and remediated.</p>	<p>Central Statistics Office.</p> <p>Monaghan County Council</p>
Soils and Geology			
SL1: Protect and maintain the quality of soils.	<p>No incidents of soil contamination.</p> <p>Re-use of soil from redeveloped sites where possible.</p>	<p>Number of Incidents of soil contamination.</p> <p>Excessive landfilling of quality soil.</p>	<p>Monaghan County Council</p>
SL2: Protect and conserve geological sites.	<p>No inappropriate development within/around geological heritage sites.</p> <p>Designation of additional geological sites.</p>	<p>Number of additional geological sites designated within the lifetime of the plan.</p>	<p>Monaghan County Council.</p> <p>Geological Survey of Ireland.</p>
Water			
WR1: Protect the quality of surface and groundwaters as sources of drinking water, assets for amenity and recreation and for ecosystems.	<p>Improvement/ No deterioration in surface/groundwater quality by 2015</p>	<p>Changes in water quality.</p>	<p>Monaghan County Council.</p> <p>Environmental Protection Agency.</p>
WR2: To manage areas which are currently at risk of flooding or are likely to pose a significant flood risk in the future.	<p>Compliance with “The Planning System and Flood Risk Management Guidelines”.</p> <p>Prohibit development which would be directly exposed to</p>	<p>Increase/Decrease in incidents of flooding.</p> <p>Number of planning applications refused on the grounds of flood risk.</p>	<p>Monaghan County Council.</p> <p>Office of Public Works.</p>

	<p>flooding or which would exacerbate flooding.</p> <p>Undertake a Strategic Flood Risk Assessment (SFRA).</p>	SRFA undertaken during lifetime of the plan.	
WR3: Protect and improve County Monaghan's water resources in accordance with the Neagh Bann and North Western River Basin Management Plans.	Improvement/ No deterioration in surface/groundwater quality by 2015.	Changes in water quality.	<p>Monaghan County Council.</p> <p>Environmental Protection Agency.</p>
Air and Climatic Factors			
CL1: Encourage a shift from fossil fuel dependent vehicles to more sustainable modes of transport.	<p>Reduce the number of private vehicles on the road.</p> <p>Increase in public transport use.</p> <p>Increase in the number of cycle routes in the county.</p> <p>Increase in the number of looped walks, and long and medium distance walking routes.</p>	<p>Percentage increase/decrease in car ownership.</p> <p>Number of population travelling to work/school on public transport.</p> <p>Number of cycle routes developed in the county through the lifetime of the plan.</p> <p>Number of looped walks and long and medium distance walking routes developed in the county through the lifetime of the plan.</p>	<p>Central Statistics Office.</p> <p>National Roads Authority.</p> <p>Monaghan County Council</p>
CL2: Encourage a shift from fossil fuel dependent energy to more sustainable energy.	<p>Increase in the use of renewable energy sources in appropriate locations.</p> <p>Increase in the development of micro renewable electrical generation technologies.</p> <p>Identification of areas where there is sufficient wind energy resources having regard to the Landscape Character Assessment.</p> <p>Promotion of energy efficient buildings.</p> <p>Encourage the provision of alternative fuels in all new service/filling stations.</p>	<p>Number of planning applications received and granted for wind turbines, photo voltaic cells, micro combined heat and power plants.</p> <p>Completion of a landscape sensitivity analysis during the lifetime of the development plan.</p> <p>Number of planning applications granted within energy efficient proposals incorporated.</p> <p>No of service/filling stations granted with facilities for the provision of alternative fuels.</p>	Monaghan County Council
Material Assets			
MA1: Maintain and improve the availability and quality of all community related infrastructure, services and facilities and ensure the prudent management of environmental resources.	Increase in community related infrastructure, services and facilities.	Percentage increase in community related infrastructure, services and facilities throughout the lifetime of the plan.	Monaghan County Council.

Cultural Heritage			
<p>CH1: To protect and conserve the cultural heritage of the County including architectural and archaeological heritage.</p>	<p>No inappropriate development which would be architectural/archaeological heritage.</p> <p>Additions to the Record of Protected Structures.</p> <p>Additions to Architectural Conservation Areas (ACAs).</p> <p>Submission of Architectural Impact Assessment/Conservation Plans where application, where works are proposed to Protected Structures.</p> <p>Consultation with the Department of Arts, Heritage and the Gaeltacht on planning applications where relevant.</p>	<p>Development which was undertaken and resulted in loss or damage to architectural/archaeological heritage.</p> <p>Number of additions to the Record of Protected Structure within the lifetime of the development plan.</p> <p>Number of Architectural Impact Assessment/Conservation Plans submitted with planning applications.</p> <p>Number of planning applications referred to the Department of Arts, Heritage and the Gaeltacht for consultation.</p>	<p>Monaghan County Council Department of Arts, Heritage and the Gaeltacht.</p>
Landscape			
<p>L1: To protect and conserve the quality, character and distinctiveness of landscape and avoid significant adverse impacts on the landscape.</p>	<p>No developments to be conspicuously located within sensitive landscapes.</p> <p>No disruption of views from scenic routes.</p> <p>Implementation of the County Monaghan Landscape Character Assessment (2008)</p>	<p>Loss of important views.</p> <p>Number of additional Landscape Protection/Conservation areas designated during the lifetime of the development plan.</p> <p>Number of developments approved within primary/secondary/visual amenity areas.</p> <p>No of additional primary/secondary/visual amenity areas designated throughout the life of the development plan.</p>	<p>Monaghan County Council</p>

11.0: Assessment of Aims, Policies and Objectives

This section will examine the potential effects of implementing the draft development plans on the environment. This is achieved through the examination of each policy and objective proposed by the draft development plans under the headings that indicate whether the implementation of the draft development plans is likely to improve, conflict or have a neutral effect on the environment.

Based on an understanding of the existing and emerging environmental conditions in the County, a number of tentative Strategic Environmental Objectives have been developed to assess the potential effects of the implementation of the draft development plans on the environment.

The SEOs are used as standards against which the policies and objectives of the draft development plans can be evaluated in order to help identify areas in which significant adverse impacts are likely to occur, if unmitigated against.

The SEOs will be applied to the relevant policies and objectives of the draft development plans and a matrix (Refer to table 32 on the following pages), will be formed giving a clear indication of the potential environmental effects of the draft development plans.

Table 30: Criteria for appraising the effect of the Draft Development Plans on the Strategic Environmental Criteria

Probable conflict with status of SEOs: Unlikely to be mitigated	Potential conflict with status of SEOs	Uncertain interaction with status of SEOs	Neutral interaction with status of SEOs	No Likely interaction with status of SEOs	Likely to improve status of SEOs
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Table 31: Strategic Environmental Objectives (SEOs)

SEO Code	Strategic Environmental Objectives (SEOs)
BIO1	Ensure compliance with the Habitats Directive by protecting all Natura 2000 sites and habitats of species within the County.
BIO2	Conserve and enhance the diversity of habitats and protected species and promote the sustainable management of these areas.
BIO3	Ensure compliance with Article 10 of the Habitats Directive with regard to ecological corridors and contiguous areas of habitats.
POP1	Facilitate a good quality of life for the County's residents based on high quality living and working environments.
POP2	Facilitate more sustainable travel patterns.
HH1	Protect Human Health from hazards/nuisances arising from traffic and incompatible land uses (e.g. quarrying, industrial activities).
SL1	Protect and maintain quality of soils.
SL2	Protect and conserve geological sites.
WR1	Protect the quality of surface and groundwaters as sources of drinking water, assets for amenity and recreation and for ecosystems.
WR2	To manage areas which are currently at risk of flooding or are likely to pose a significant flood risk in the future.
WR3	Protect and improve County Monaghan's water resources in accordance with the Neagh Bann and North Western River Basin Management Plans.
CL1	Encourage a shift from fossil fuel dependant vehicles to more sustainable modes of transport.
CL2	Encourage a shift from fossil fuel dependent energy to more sustainable energy.
MA1	Maintain and improve the availability and quality of all community related infrastructure, services and facilities and ensure the prudent management of environmental resources.
CH1	To protect and conserve the cultural heritage of the County including architectural and archaeological heritage.
L1	To protect and conserve the quality, character and distinctiveness of landscapes and avoid significant adverse impacts on the landscape.

12.0: Mitigation Measures

Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 requires that consideration be given to “the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan”.

~~Mitigation involves improving significant negative effects and enhancing positive ones. Each policy and objective of the draft development plans were individually assessed, details of which are provided in Table 31. Recommended mitigation (changes) which resulted as part of this assessment is identified in Table 32.~~

~~There are policies which have been identified as having potential impact on Strategic Environmental Objectives and uncertain interaction with the Strategic Environmental Objectives, the majority of these shall be subject to further detailed assessment and mitigation at implementation stage through best practice in the development management process and implementation of the Plan. In addition certain applications for developments within the County may be subject to individual Environmental Impact Assessments and Appropriate Assessments.~~

Mitigation involves ameliorating significant negative effects. Where there are significant negative effects, consideration is given in the first instance to preventing such effects or, where this is not possible for stated reasons, to lessening or offsetting those effects. Mitigation measures can be roughly divided into those that: avoid effects; reduce the magnitude or extent, probability and/or severity of effects; repair effects after they have occurred, and; compensate for effects, balancing out negative impacts with other positive ones.

The SEA of the Draft Plan was carried out in-house; as such environmental vulnerabilities, issues and constraints were considered in the first instance through the plan writing process and in this regard formulated with the explicit intention of protecting the environment and avoiding potentially adverse environmental impacts. The ‘Assessment’ proper as outlined in table 31 of this document assessed each aim, objective and policy individually and recommended mitigation (changes) are identified in table 32, namely policy changes.

The mitigation measures referred to below will act to prevent, reduce and as much as possible offset any significant effects of implementing the Draft Monaghan County Development Plan 2013-2019 (incorporating the Development Plans for the Towns of Monaghan, Carrickmacross, Castleblayney and Clones).

12.1 Mitigation through Consideration of Alternatives

A range of potential alternative scenarios for the plan were identified at an early stage in the process and evaluated for their likely significant environmental effects. The environmental baseline and the Environmental Objectives were used in order to predict and evaluate the environmental effects of implementing the alternatives. Communication of the findings of this evaluation helped the plan-making team to make an informed choice as to which alternative was to be put before the Elected Members as the proposed draft Plan. Communication of this evaluation to the Elected Members through this report helped them to make an informed choice with regard to the making of the Plan.

12.2: Re-worded Policies and Objectives.

This section shows how certain plan provisions were re-worded as a result of the SEA and AA processes. The text in blue is new text added to the original objective/policy. It is considered that the inclusion of these objectives/policies will offset any significant environment effects regarding the implementation of the plan.

Chapter 3: Settlement/Core Strategy

Inclusion of policies CSP1, RHP1, RHP10, RHP12.

Chapter 4: Environment and Heritage

Inclusion of objectives HPO1, GHO1, BDO 5, BDO6, SBP1. DSP1, WLO1. WLP 1, AAO1. WPO4 and WPO5. ABO5 and ABO6. PSO4. AHO3. AQO 3 and AQO4

Inclusion of policies AAP1-AAP5 WPP2, WPP5, WPP10, WPP11, WPP12 ABP1. PSP2

Amendment to objective BDO4: Promote the **RETENTION**, management and development of wildlife features such as hedgerows, riparian corridors, wetland **AND OTHER SEMI NATURAL FEATURES** that are essential for the migration, dispersal and generic exchange of wild species. **IN EXCEPTIONAL CIRCUMSTANCES, WHERE IT HAS BEEN DEMONSTRATED TO THE SATISFACTION OF THE PLANNING AUTHORITY THT THE REMOVAL OF HABITATS OF LOCAL BIODIVERSITY VALUE CANNOT BE AVOIDED, EQUAL QUANTITIES OF HABITAT MUST BE REINSTATED. DETAILS OF WHICH MUST BE AGREED WITH THE PLANNING AUTHORITY.**

Amendment to policy THP1: protect trees and hedgerows from development that would impact adversely upon them. **DEVELOPMENT PROPOSALS WHICH NECESSITATE THE REMOVAL OF EXTENSIVE AMOUNTS OF TREES AND HEDGEROWS SHOULD BE AVOIDED AND TRANSPLANTING OF EXSITING TREES AND HEDGEROWS SHOULD BE EMPLOYED WHERE APPROPRIATE.**

Amendment to policy THP3: ensure that existing mature trees, woodlands and hedgerows are, as far as practicable, preserved and incorporated into any new developments or where removal is avoidable **COMPENSATORY PLANTING OF AT LEAST EQUAL AMOUNTS OF NATIVE TREES AND SHRUBS SHOULD BE UNDERTAKEN.** ~~Replaced by new native planting~~

Amendment to policy WPP1: In assessing applications for development Monaghan County Council will consider the impact on the quality of surface waters and will have regard to targets and measures set out in the Neagh Bann and North Western International River Basin Management Plans **AND WHERE APPROPRIATE THE BLACKWATER, GLYDE, FANE, WOODLAND AND ERNE EAST WATER MANAGEMENT UNIT ACTION PLANS.**

Amendment of objective GIO1: Develop a Green Infrastructure Strategy within County Monaghan during the life-time of the development plan, **ENSURING THE PROTECTION OF COUNTY MONAGHAN'S NATURA 2000 SITES ARE CENTRAL TO THIS STRATEGY. THIS STRATEGY SHALL BE PREPARED IN FULL COMPLIANCE WITH THE REQUIREMENTS OF SEA AND HABITATS DIRECTIVE.**

Chapter 5 Economic Activity

Inclusion of objectives: RUO1, AGO1, FYO1, CCO1-CCO4, ERO1, ERO10 INO1. EIO1 RTO1 TMO1

Chapter 6 Infrastructure and Services

Inclusion of objectives: TRO1 PTO1 RNO1, RNO7 and RNO8 URO1 and URO5 WSO1 and WSO8 WTO1, WTO9. FLO1, FLO2, FLO6. WMO1 TEO1. FSO1 and CDO1.

Inclusion of policy: MAP1.

Amendment to WTO6: “Complete the proposals outlined in the Water Services Investment Programme and Assessment of Needs Report 2010-2013, subject to funding. **WHERE NEW OR UPGRADES TO WASTE WATER TREATMENT PLANTS ARE PROPOSED, THESE SHALL FULLY COMPLY WITH THE WATER FRAMEWORK DIRECTIVE AND THE URBAN WASTE WATER REGULATIONS**”.

Amendment of Policy WTP1: “Development **PROPOSING TO CONNECT TO THE PUBLIC WASTEWATER TREATMENT SYSTEM** shall be limited or restricted in those areas where capacity is ~~not available~~ **INSUFFICIENT TO ACCOMMODATE THE DEMANDS OF THE DEVELOPMENT** and where funding is unavailable to increase the ~~size~~ **CAPACITY** of the relevant facility.

Amendment of Policy WMP3: “Apply the ‘Polluter Pays’ Principle, **PROXIMITY PRINCIPLE, PRECAUTIONARY PRINCIPLE OF SHARED RESPONSIBILITY IN ALL WASTE MANAGEMENT INITIATIVES**”.

Chapter 7: Development of Community Infrastructure

Inclusion of objectives: CIO1, CIO12, ACO1, CFO1, RAO1, RAO 14, CWO1, CWO2 and CWO3, TAO1, NHO1. SEO1

Inclusion of policy: SEP1

Chapter 8: Strategic Objectives for Settlements

Inclusion of objective: SSO14, SSO16, SSO17, SSO18, SSO19, SSO20, UDO 1, TCO1, SRO1, IEO1, RPO1, SNO1, SBO1, REO1, STO1

Chapter 9 – Monaghan Town Development Plan

Inclusion of objectives: MN1, MN4, MN6, MN8, MN11, MN13, MN14

Chapter 10 – Carrickmacross Town Development Plan

Inclusion of objectives: CK1, CK4, CK8, CK11, CK13, CK17

Chapter 11 – Castleblayney Town Development Plan

Inclusion of objectives: CBO1, CBO5, CBO7, CBO9, CBO11

Chapter 12 – Clones Town Development Plan

Inclusion of objectives: CLO1, CLO2, CLO6, CLO9, CLO11, CLO14

Chapter 13 – Ballybay Town Development Plan

Inclusion of objectives: BBO1, BBO5, BBO7, BBO11

Chapter 14 – Village Development Plans

Inclusion of objective: VPO1

Chapter 15 – Development Management Guidelines

Inclusion of policies: TVP1, SFP9, ASP1, HDP1, RDO1, RDP1, RAP2, TAP1, ADP1, AFP1, AFP9, AFP10, CDP1, REP1, REP3, REP4, TEP1, TEP2, EGP1, INP1, EIP1, EIP2, RTP1, TOO1, TOO2, NRP9.

Amendment of policy LSP1 “Existing trees and hedgerows soften the visual impact on any new development, give shelter and maturity to the site, and should be retained. **DEVELOPMENT PROPOSALS WHICH NECESSITATE THE REMOVAL OF EXTENSIVE AMOUNTS OF TREES AND HEDGEROWS WILL BE RESISTED**”.

Amendment of policy LSP3 “Careful consideration should be given to roadside boundary treatments and access. The disruption of existing boundary features should be avoided. Trees, hedgerows, stone walls and earthen embankments are an attractive part of the rural scene and should be retained. Where these have to be removed to provide the required sight distance, they should be reinstated behind the sight lines. The removal of excessive amounts of roadside vegetation should be avoided. **TRANSPLANTING OF EXISTING TREES AND HEDGEROWS SHOULD BE EMPLOYED AS APPROPRIATE**”.

Amendment of policy TEP7 “Masts or other apparatus shall not generally be permitted in areas of Primary or Secondary Amenity, **SPECIAL PROTECTION AREAS, SPECIAL AREAS OF CONSERVATION**, in Architectural Conservation Areas or on or near Protected Structures”.

Amendment of policy INP7 “Industrial development shall not generally be permitted in areas of Primary or Secondary Amenity, **SPECIAL PROTECTION AREAS, SPECIAL AREAS OF CONSERVATION**, in Natural Heritage Areas, in Architectural Conservation Areas or on or near Protected Structures or Monuments”.

Amendment of policy EIP4 “**EXTRACTIVE INDUSTRY** development shall not generally be permitted in **SPECIAL PROTECTION AREAS, SPECIAL AREAS OF CONSERVATION**, areas of Primary or Secondary Amenity, in Natural Heritage Areas, in Architectural Conservation Areas or on or near Protected Structures or Monuments, unless where the Council is of the opinion that the need for the resource outweighs the environmental impact, having regard to the scarcity or otherwise of the mineral resource. In all circumstances the Council will balance the case for a particular quarrying operation against the need to protect the environment”.

Amendment of policy EIP9 “**ALL APPLICATIONS FOR EXTRACTIVE INDUSTRY PROPOSALS MUST BE ACCOMPANIED BY AN INTEGRATED PHASED DEVELOPMENT AND RESTORATION PLAN FOR AFTER CARE/REUSE OF THE SITE**”. ~~Ensure that land is reinstated and landscaped on a phased basis following the termination of extractive activities.~~

Amendment of policy TOO3 “**RESIST DEVELOPMENT THAT WOULD ADVERSLEY AFFECT THE NATURAL RESOURCES UPON WHICH TOURISM IS BASED**” ~~Protect through the enforcement of policies in relation to resource protection and holiday home development.~~

Amendment of policy TOO5 “Facilitate infrastructure for water related activities such as canoeing/kayaking, boating, angling, and canal cruising. **SUCH DEVELOPMENTS MUST BE CONSISTENT WITH THE NATURAL AND RECREATIONAL VALUE OF THE WATER BODY AND ANY HERITAGE DESIGNATION**”.

Amendment of policy TOO6 “Facilitate infrastructure for marine related activities such as boating, angling, and canal cruising. **SUCH DEVELOPMENTS MUST BE CONSISTENT**

WITH THE NATURAL AND RECREATIONAL VALUE OF THE WATER BODY AND ANY HERITAGE DESIGNATION”.

Chapter 16: Housing Strategy

Inclusion of objective HGO1 and policy HGP1.

~~Schedule 2B of the Planning and Development (Strategic Environmental Assessment) Regulations 2004 requires that consideration be given to “the measures envisaged to prevent, reduce and as fully as possible offset any significant adverse effects on the environment of implementing the plan”. Mitigation involves improving significant negative effects and enhancing positive ones.~~

~~Each policy and objective of the draft development plans were individually assessed, details of which are provided in Table 26. Recommended mitigation (changes) which resulted as part of this assessment is identified in Table 27.~~

~~There are policies which have been identified as having potential impact on Strategic Environmental Objectives and uncertain interaction with the Strategic Environmental Objectives, the majority of these shall be subject to further detailed assessment and mitigation at implementation stage through best practice in the development management process and implementation of the Plan. In addition certain applications for developments within the County may be subject to individual Environmental Impact Assessments and Appropriate Assessments.~~

~~The mitigation measures referred to above will act to prevent, reduce and as much as possible offset any significant effects of implementing the Draft Monaghan County Development Plan 2013-2019 (incorporating the Development Plans for the Towns of Monaghan, Carrickmacross, Castleblayney and Clones).~~

13.0: Incorporating Environmental Issues into the Draft Monaghan County Development Plan 2013-2019 (Incorporating the development plans for the towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay)

Table 33 below outlines how the SEA process has shaped the drafting of the draft development plans. The table outlines how the environmental issues raised throughout the SEA process were incorporated into the draft plans as objectives or policies. The list is not exhaustive and the table does not include all references within the Plan.

Table 33: Incorporation of Environmental Issues into the Draft Development Plans.

Environmental Issue	Objective, Policy or reference in the Plan	Additional Policy Objective or Reference Required
Biodiversity, Flora and Fauna		
Impact of Works	BDO1- BDO7, THO1-THO2, THP1- THP4, SBP1, DSP1- DSP2, WLO1, WLP2, AAO1, AAP1, APP2, APP3, APP4, APP5, GIO1, GIO2, GIO3, GIP1, AGO3, AGO4, FYO3, ERO10, INO11, EIO3, TRO10, RNO8, WSO7, RAO4, RAO13, CK1, CK2, CK3, CBO3, CBO13, BBO4, BBO13, TVP14, HDP10, LSP1-LSP4, RAP2, AFP7- AFP8, INP7, EIP4, EIP7, TOO2	<p>Incorporate an explanatory paragraph and policy BDO6 within Chapter 4 regarding The Monaghan Biodiversity Action Plan 2009-2014.</p> <p>Include additional wording within objective BDO4 regarding the reinstatement of habitat where removal of habitats and biodiversity cannot be avoided.</p> <p>Include BDO5 regarding invasive species.</p> <p>Policy THP1 has been amended to discourage the removal of extensive amounts of trees and hedgerows and encouraging the transplanting of existing trees and hedgerows.</p> <p>Policy THP3 has been amended to include details of compensatory planting of native trees and shrubs.</p> <p>Objective ERO10 included to ensure the protection of the natural heritage when considering electricity and gas infrastructure.</p> <p>Policy LSP1 has been amended to indicate that Development proposals which necessitate the removal of extensive amounts of trees and hedgerows will be resisted.</p>

		<p>Expand LSP3 to include reference to the transplanting of trees where necessary.</p> <p>Include RAP2 to ensure new accesses are positioned to minimise hedgerow and tree loss.</p> <p>Include SSO19 to ensure protection of areas designated as Landscape Protection/Conservation.</p>
Protection of Water Courses	WPO1-WPO5, WPP1-WPP12	
Control of Invasive Species	HPO1, BDO5, BDO4	<p>Incorporate an explanatory paragraph and objective within Chapter 4 regarding The Draft County Monaghan Heritage Plan 2012-2017.</p> <p>Include BDO5 regarding invasive species.</p>
Protection of Natura 2000 sites, including those in Northern Ireland	<p>BDO3, SBP1, DSP1, DSP2, AAO1, AAP1-AAP5, ABP1, RRO1, AGO1, WPP10, FYO1, ERO1, INO1, EIO1, RTO1, TMO1, TRO1, PTO1, RNO1, URO1, WSO1, WTO1, FLO1, WMO1, TCO1, MAP1, FSO1, CDO1, CIO1, ACO1, CFO1, RAO1, CWO1, TAO1, NHO1, SEO1, SEP1, SSO14, URO1, TCO1, SRO1, IEO1, RPO1, SNO1, SBO1, REO1, STO1, MN1, MN4, MN6, MN8, MN11, MN14, CK1, CK4, CK8, CK11, CK13, CK17, CBO1, CBO5, CBO7, CBO9, CBO11, CLO1, CLO2, CLO6, CLO9, CLO11, CLO14, BBO1, BBO5, BBO7, BBO11, VPO1, TVP1, ASP1, HDP1, RDO1, RDP1, TAP1, ADP1, AFP1, AFP10, CDP1, REP1, REP3, REP4, TEP1, TEP2, TEP7, EGP1, INP1, INP7, EIP1, EIP4, RTP1, TOO1, TOO5, TOO6</p>	
Ecological Networks	BDO1-BDO7, THO1-THO2, THP1-THP4, GIO1-GIO3	<p>Expand wording of BDO4 to require the reinstatement of habits where required.</p> <p>Inclusion of BDO5 regarding invasive species.</p> <p>Inclusion of BDO6 referencing the Monaghan Biodiversity Action Plan 2009-2014.</p>

		<p>Expand THP1 to indicate that where required transplanting of trees and hedgerows will be employed.</p> <p>Extend THP3 to include reference to compensatory planting where appropriate.</p>
Population and Human Health		
Quality of Life	Vision Statement	<p>Include SSO16 ensuring all settlements have an appropriate range of facilities and services.</p> <p>Include SSO17 encouraging the development of sustainable compact development forms</p> <p>Include SSO18 to facilitate and provide infrastructure and services necessary to accommodate population growth.</p>
Population Trends, Regional Population Targets and Settlement Frameworks	<p>Chapter 3. Settlement/Core Strategy</p> <p>CSP1-CSP2, RHP1-RHP13</p>	
Health and its relationship with environmental issues	<p>WPO1, WPO5, NCP1, AQO1-AQO4, AQP1-AQP2, TRO5, CIO1-CIO13, RAO5-RAO8, RAO13-RAO14, CWO1-CWO6, CWP1-CWP3, SSO12, HDP 7, HDP11, HDP16</p>	<p>Inclusion of AQO3 supporting public transport and non-motorised modes of transport.</p> <p>Inclusion of AQO4 encouraging the integration of land use and transportation.</p> <p>Inclusion of CIO12 regarding allotment provision.</p> <p>Inclusion of RAO14 regarding provision of recreational facilities for older persons.</p> <p>Inclusion of objectives CWO2 and CWO3 encouraging the development and facilitation of walking and cycling.</p> <p>Expand objective CWO6 to identify safe and convenient cycle routes in Urban Areas.</p>
Provision of Community facilities	<p>CIO1-CIO13, ACO1-ACO7, CFO1-CFO3, RAO1-RAO 14, IFO1-IFO3, NHO1-NHO2, SEO1-SEO3, SEP1-SEP2, SSO2, SSO5, SSO6, SSO12, SSO18, REO1-REO7, MN13, CK14, CK15,</p>	<p>Inclusion of CIO12 regarding allotment provision.</p> <p>Inclusion of RAO14 regarding provision of recreational facilities for older persons.</p>

	CBO10, CLO12, CLO13, BBO8, BBO10, HDP7, HDP8, HDP19	
Flooding	WPP4, WPP12, WLO1, WLP2, FLO1-FLO6, FLP1- FLP2	<p>Inclusion of WPP12 indicating that floodplains and riparian corridors should be maintained free from development.</p> <p>Inclusion of text within Chapter 6 regarding the preparation of a Strategic Flood Risk Assessment.</p> <p>Inclusion of FLO2 regarding the implementation of The Planning System and Flood Risk Management Guidelines”</p> <p>Inclusion of FLO6 emphasising the importance of county’s floodplains as vital green infrastructure</p>
Water		
Impact of development for example forestry, agricultural, infrastructural	WPO1, WPO-WPO5, WPP1- WPP12 AGO4, FYO3, INO11, RNO8, WSO4, WTO2, WTO3, WTO5, WTO6, WTP1, MN12, CK2, CBO4, CLO2, BBO4, HDP13, ETP1-ETP5, AFP9, EIP7,	
Alignment of the International River Basin Management Plans	WPO1-WPO5, WPP1- WPP12, WTO4, WTO7	
Waste Water and Drinking Water	WPO1, WPO5, WPP7, WSO1-WSO8, WTO1- WTO10, WTP1-WTP2, HDP13, ETP1-ETP5	Inclusion of WSO8 regarding the cooperation with the Federation of Group Water Schemes to improve the quality and capacity of water supply.
Air and Climate Change		
Climate Change and Air Quality	AQO1-AQO4, AQP1, AQP2, CCO1-COO4, TMO18, TRO2,-TO6, TRO9, RNO7, URO 5,CWO1-CWO6, CWP1- CWP3, RPO3, HDP11,	<p>Inclusion of AQO3 supporting public transport and non-motorised modes of transport.</p> <p>Inclusion of AQO4 encouraging the integration of land use and transportation.</p> <p>Inclusion of climate change paragraph within Chapter 5, and subsequent objectives CCO1-CCO4.</p>

		<p>Inclusion of TNO7 to facilitate the provision of cycle lanes and footpaths.</p> <p>Inclusion of URO 5 to facilitate the identification and development of cycle lanes in the main towns of the County.</p> <p>Inclusion of objectives CWO2 and CWO3 encouraging the development and facilitation of walking and cycling.</p> <p>Expand objective CWO6 to identify safe and convenient cycle routes in Urban Areas.</p> <p>Include NRP9 to ensure developments of national roads address issues including air pollution.</p>
<p>Limiting Greenhouse Gas Emissions and reducing dependency on fossil fuels</p>	<p>AQO1-AQO4, AQP1, AQP2, CCO1-CCO4, ERO1-ERO12, TMO18, TRO2,-TO6, TRO9, RNO7, URO 5,CWO1-CWO6, CWP1- CWP3, RPO3, HDP11, EGP2-EGP3</p>	<p>Inclusion of AQO3 supporting public transport and non-motorised modes of transport.</p> <p>Inclusion of AQO4 encouraging the integration of land use and transportation.</p> <p>Inclusion of climate change paragraph within Chapter 5, and subsequent objectives CCO1-CCO4.</p> <p>Inclusion of ERO10 which affords for the facilitation of electricity and gas infrastructure in appropriate areas.</p> <p>Inclusion of TNO7 to facilitate the provision of cycle lanes and footpaths.</p> <p>Inclusion of URO 5 to facilitate the identification and development of cycle lanes in the main towns of the County.</p> <p>Inclusion of objectives CWO2 and CWO3 encouraging the development and facilitation of walking and cycling.</p> <p>Expand objective CWO6 to</p>

		identify safe and convenient cycle routes in Urban Areas.
Cultural Heritage		
Impacts of development	HPO1, ABO1-ABO6, ABP1-ABP2, PSO1-PSO4, PSP1-PSP4, IHO1-IHO2, CAO1-CAO4, CAP1AHO1-AHO3, AHP1-AHP8, SSO3, SSO10, SNO1-SNO5, SBO1-SBO8, MN9-MN10, CL2-CK3, CBO2-CBO4, CLO3-CLO5, BBO2-BBO4, SFP2-SFP3, SFP9	<p>Inclusion of policy SFP9 regarding canopies and protected structures and ACAs.</p> <p>Expand SFP2 and SFP3 to reference Architectural Conservation Areas</p>
Identification and protection of geological sites	GHO1,GHP1-GHP3	Inclusion of GHO1 regarding the undertaking of an audit with regard to geological heritage sites
Protection of architectural and archaeological structures and sites	HPO1, GHO1, GHP1-GHP3, ABO1-ABO6, ABP1-ABP2, PSO1-PSO4, PSP1-PSP4, IHO1-IHO2, CAO1-CAO4, CAP1, AHO1-AHO3, AHP1-AHP8, SSO3, SSO10, SBO1-SBO8, MN8-MN10, CK1, CBO1-CBO2, CLO1, CLO3, CLO4, STP2-SFP3, SFP9, ASP4, TEP7,INP7, EIP4,	<p>Inclusion of HPTO1 with reference to the Draft Heritage Plan.</p> <p>Inclusion of GHO1 regarding the undertaking of an audit with regard to geological heritage sites.</p> <p>Inclusion of ABO5 regarding protection of historic demesnes and designated landscapes.</p> <p>Inclusion of ABO6 seeking retention and appropriate use of vernacular heritage.</p> <p>Inclusion of PSO4 encouraging the appropriate reuse of Protected Structures.</p> <p>Inclusion of PSP2 regarding the appropriate development, modification, alteration or existing affecting the setting of protected structures.</p> <p>Expand objectives IHO1 and IHO2 to include reference to the Ulster Canal and Industrial Heritage.</p> <p>Inclusion of AHO3 regarding the incorporation of archaeological finds into developments.</p> <p>Expand policy APH4 to reference the conservation and preservation of built heritage.</p>

		Expand policies SFP2 and SFP3 to include reference to Architectural Conservation Areas. Inclusion of policy SFP9 regarding canopies and protected structures and ACAs.
Landscape		
Impact of development works	LPO1-LPO2, LPP1-LPP2, PAP1-PAP2, SAO1-SAO2, SAP1-SAP2, AVP1-AVP2, AGO3, INO11, RAO13, SSO19, RDP3, RDP5, RDP6, TEP7, INP7, INP8, EIP4,EIP7, TOO2.	Include policy TOO2 which indicates that tourism developments do not create a negative impact on the biodiversity, soil, water, cultural heritage or landscape.
Identification, Classification and protection of landscapes	HPO1, LPO1-LPO2, LPP1-LPP2, PAP1-PAP2, SAO1-SAO2, SAP1-SAP2, AVP1-AVP2, SBP1, DSP1-DSP2,	Inclusion of HPTO1 with reference to the Draft Heritage Plan.
Other Issues		
One off housing	CSP1, CSP2, RHP1-RHP13, LPO1-LPO2, LPP1-LPP2, PAP1-PAP2, SAO1-SAO2, SAP1, SAP2, AVP1-AVP2, THO1, THP1-THP4, RDO1-RDO2, RDP1-RDP14, RDP15-RDP20, LSP1-LSP5, RAP1-RAP3, ETP1-ETP5,TAP1-TAP3	Expand THP1 to indicate that where required transplanting of trees and hedgerows will be employed. Policy THP3 has been amended to include details of compensatory planting of native trees and shrubs.
Development of Tourism and Recreation Facilities	TMO1-TMO18, STO1-STO8, MN14-MN15, CK17-CK19, CBO11-CBO13, CLO14-CLO18, BBO11-BBO15, TDO1-TDO9.	Inclusion of TOO2 to ensure the protection of biodiversity, soil, water, cultural heritage and landscape when assessing tourism projects.
Waste Management	WMO1, WMO2, WMO3, WMO4, WMO5, WMO6, WMO7, WMO8, WMO9, WMO10, WMP1, WMP2, WMP3, WMP4,	Expand policy WMP2 to include reference to proximity principle and precautionary principle of shared responsibility.
Employment and Enterprise	RUO1-RUO2, AGO5-AGO7, FYO2, INO2-INO5, INO7-INO10, RTO2, RTO5, RTO6, RTO7, TO10,TMO2, TMO3, TMO15, SSO1-SSO3, SSO5,SSO6, SSO7, SSO8, SSO9, SSO10,SSO16, TCO2, TCO3, SRO2, SRO4, SRO5, IEO2-IEO7, MN7, CK12, CB6, CL10, AFP2-AFP5, CDP2, CDP4, INP3-INP5	Inclusion of RUO2 regarding rural revitalisation. Include SSO16 ensuring settlements have the appropriate range of facilities and services.

14.0: Conclusion

The assessment of policies and objectives outlined in Table 32 indicates:

- That the implementation of the Monaghan County Development Plan 2013-2019 (Incorporating the Development Plans for the Towns of Monaghan, Carrickmacross, Castleblayney, Clones and Ballybay) will have an overall positive impact on the environmental status of the County.
- Whilst a number of policies and objectives would have an overall positive impact on the environmental status of the county, there may be certain elements of them that could also lead to a potential for environmental conflict. Where this arises the policies and objectives should be mitigated to an acceptable level. An acceptable level means where the conflict with the status of the SEO would be rendered benign or reduced through mitigation measures and thereby become acceptable in terms of well established principles of proper planning and sustainable development.
- The impact of some objectives and policies may be uncertain.
- The implementation of the draft development plans will not give rise to probable environmental conflicts that are unlikely to be mitigated to an acceptable level. An acceptable level means where the conflict with the status of the SEO would be rendered benign or reduced through mitigation measures and thereby become acceptable in terms of well established principles of proper planning and sustainable development.