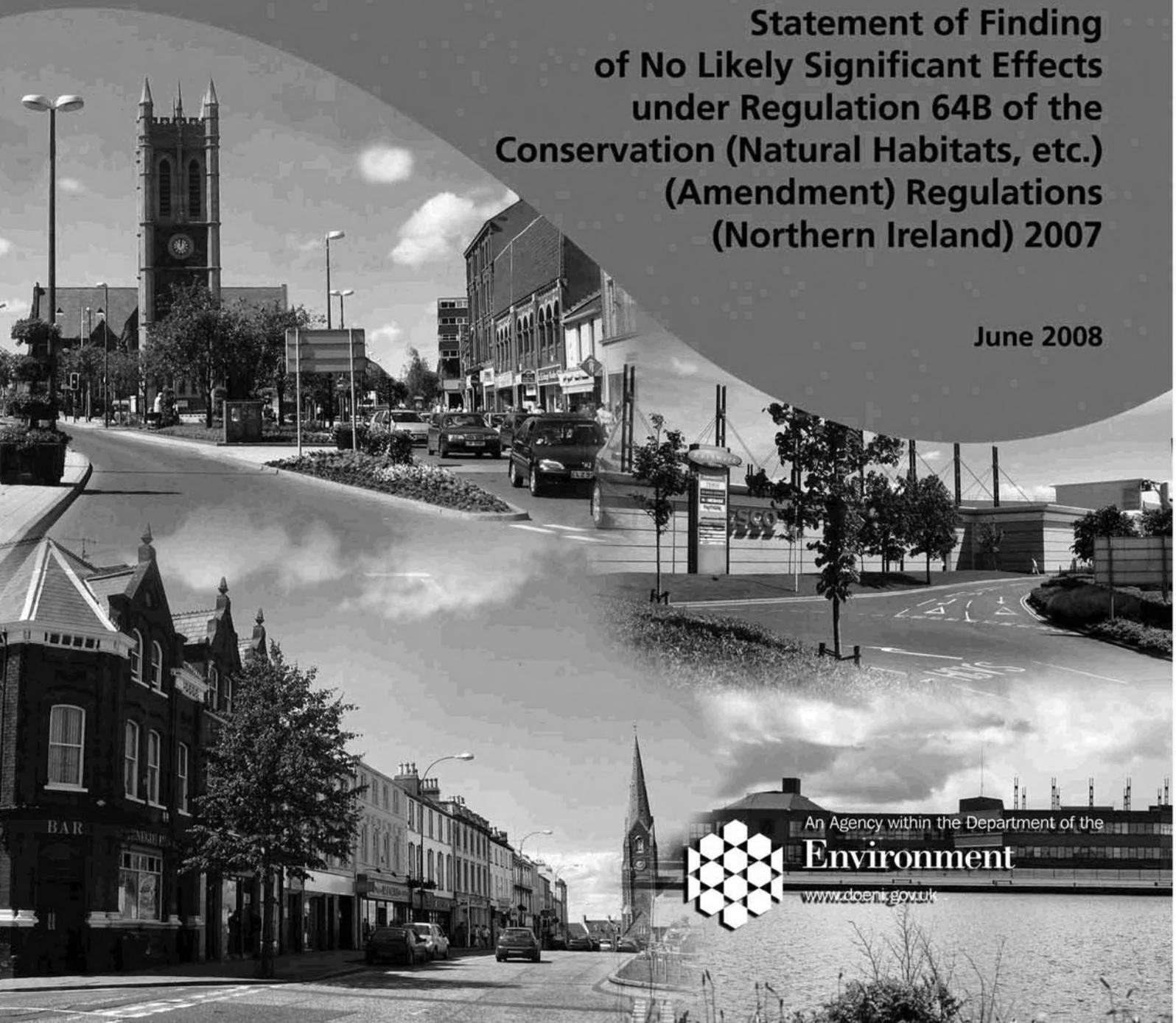




Craigavon Town Centre Boundaries & Retail Designations Plan 2010

**Statement of Finding
of No Likely Significant Effects
under Regulation 64B of the
Conservation (Natural Habitats, etc.)
(Amendment) Regulations
(Northern Ireland) 2007**

June 2008



An Agency within the Department of the

Environment

www.doeni.gov.uk

**The Craigavon Town Centre
Boundaries and Retail
Designations Plan
2010**

Statement of Finding of No Likely Significant Effects under
Regulation 64B of the Conservation (Natural Habitats, etc.)
(Amendment) Regulations (Northern Ireland) 2007

June 2008

Executive Summary

This is a record of the Assessment, required by Regulation 64B of the Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007. It was undertaken by Environment and Heritage Service (EHS) in accordance with the above Regulations on behalf of The Planning Service. The assessment considered the Draft Craigavon Town Centre Boundaries and Retail Designations Plan 2010 (hereafter referred to as the Plan), and the Planning Appeals Commission (PAC) recommendations contained in the Report of the Independent Examination dated 31 December 2007.

One designated European site and one Ramsar site were identified that potentially could be affected by the implementation of the Plan, namely:

- Lough Neagh & Lough Beg Special Protection Area (SPA)
- Lough Neagh & Lough Beg Ramsar Site

A Test of Likely Significance (TOLS) was carried out on the Plan with the PAC recommendations alone, and in combination with other relevant plans and regional planning policy, and no significant adverse effects that would impact on the integrity of either the Lough Neagh & Lough Beg Natura 2000 or Ramsar sites were identified.

Consequently a Statement of Finding of No Likely Significance Effects has been prepared.

The recording of this assessment is 6 June 2008.

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1.0 INTRODUCTION

1.1 This statement contains a record of the Assessment, required by Regulation 64B of the Conservation (Natural Habitats, etc.) (Amendment) Regulations (Northern Ireland) 2007. It has been undertaken by EHS on behalf of The Planning Service in respect of the Plan and the PAC recommendations contained in the Report of the Independent Examination dated 31 December 2007, in accordance with the Habitats Directive (Council Directive 92/43/EEC).

1.2 The Assessment has been carried out using the following guidance: *Habitats Regulations Guidance Notes* drawn up by English Nature; *Interim Guidance; Assessing Development Plans in Terms of the Need for Appropriate Assessment* drawn up by the Scottish Executive, *Planning for the Protection of European Sites: Appropriate Assessment. Guidance for Regional Spatial Strategies and Local Development Documents* drawn up by the Department for Communities and Local Government and the European Commission document; *Assessment of plans and projects significantly affecting Natura 2000 sites. Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC.*

1.3 The Article 6 Process

The methodology follows an initial 'screening stage' in which the Natura 2000 and Ramsar sites which could potentially be impacted upon by the implementation of the Plan are identified and described. The Plan is described and a Test of Likely Significance (TOLS) is carried out on the likely impact of the proposals on the conservation objectives of designated Natura 2000 sites and on the nature conservation interests of the Ramsar sites.

1.4 Where one or more likely significant effects are found, or where it cannot be objectively shown that adverse effects will not occur, the second stage of the process is entered and the Plan becomes subject to an 'Appropriate Assessment' against the conservation objectives of each of those sites.

1.5 Where it is determined that there are no likely significant effects on the designated sites, a Statement of 'Finding of No Likely Significant Effects' is prepared to explain how the overall conclusion, was arrived at.

1.6 Area Plan Hierarchy

Area Plans sit within an overarching hierarchy of Regional Planning Policy which includes the Regional Development Strategy (RDS), A Planning Strategy for Rural Northern Ireland and various Planning Policy Statements (PPSs). The Plan cannot be implemented in isolation from regional planning policy and for the purposes of this Article 6 Assessment; the Plan is assessed in combination with regional planning policy. In this

instance, PPS2: Planning and Nature Conservation, and PPS5: Retailing and Town Centres, are particularly relevant.

- 1.7 The Plan is not directly connected with or necessary to the management of the Lough Neagh & Lough Beg Natura 2000 or Ramsar sites.
- 1.8 This statement should be read in conjunction with the Plan.

2.0 STAGE ONE - SCREENING AND TEST OF LIKELY SIGNIFICANCE

2.1 Description of the Draft Craigavon Town Centre Boundaries and Retail Designations Plan 2010

- 2.1.1 The Draft Craigavon Town Centre Boundaries and Retail Designations Plan 2010 is a local plan prepared under the provisions of Part III of the Planning (Northern Ireland) Order 1991 by the Planning Service, an agency within the Department of the Environment.
- 2.1.2 The Draft Craigavon Area Plan 2010 was published in April 2000 and a Public Local Inquiry held by the PAC during 2001 to consider the various objections received. The Inquiry covered a wide range of issues and, in relation to town centre boundaries and retail designations for the three centres of Central Craigavon, Lurgan and Portadown, concluded that these should be redrawn on the basis of a series of broad principles set out in the Commissioner's Report.
- 2.1.3 The Department accepted this recommendation and the Craigavon Area Plan 2010 was adopted in August 2004, without town centre boundaries or related retail designations.
- 2.1.4 The Draft Craigavon Town Centre Boundaries and Retail Designations Plan 2010 is additional to the adopted Craigavon Area Plan 2010 and covers the three town centres of Central Craigavon, Lurgan and Portadown.
- 2.1.5 The purpose of the Draft Plan is to inform the general public, statutory authorities, developers and other interested bodies within the context of the adopted Craigavon Area Plan 2010 of the policy framework and designations that will be used to guide development decisions within the Plan Area.
- 2.1.6 The aim of the Draft Plan is to provide a planning framework which facilitates high quality and sustainable commercial growth, and other related uses, resulting in the creation of healthy, balanced and vibrant town centres for Central Craigavon, Lurgan and Portadown.
- 2.1.7 The Draft Plan Strategy is to:
- Facilitate a level of overall commercial growth in the two centres of Lurgan and Portadown which reflects their individual status as towns and is in general conformity with the RDS; and
 - Ensure the availability of adequate opportunities for regeneration and the mix of uses appropriate to town centres, such as offices, leisure and civic uses, subject to prevailing regional planning policy

and the proposals contained in the adopted Craigavon Area Plan 2010.

2.2 Summary of PAC Recommendations

2.2.1 The PAC made the following recommendations on the Draft Plan:

- That the Retail Strategy and Policy R1 be omitted from the plan;
- That the Portadown TCB be amended to exclude DOS P1 and properties on the northern and southern side of the Bridge Street frontage;
- That lands at Lurgan including land at Kitchen Hill, area east of Malcolm Road and south of Queen Street, land to the east of Johnson's Row, DOS L2 and certain properties along Wellington Street, some housing to the rear of Lidl and land and premises on the north and north-eastern side of Charles Street be excluded from Lurgan TCB;
- That the TCB for central Craigavon be amended to include lands to the east of Lakeview Road and to the north and south of the Civic Centre and lands to the west of the Court House and Marlborough House as far as Highfield Road and extending as far as Mandeville Road to include Marlborough Retail Park and adjacent open areas;
- That no other policies should be applied to 'Primary Retail cores' Designation 2;
- There should be no changes to the PRC boundaries for Portadown or Lurgan;
- That the PRC boundary for Central Craigavon is extended; and
- No change to Policy R2 or the defined PRF for Lurgan.

2.2.2 This Assessment has been carried out on the Draft Craigavon Town Centre Boundaries & Retail Designations Plan 2010 as amended in light of the PAC recommendations, and in combination with other relevant plans and policies.

2.3 Identification of the Natura 2000 and Ramsar Sites which could potentially be impacted

2.3.1 There are no Natura 2000 or Ramsar sites within the Plan Area. There are two sites outside the Plan Area to be considered, namely:

- Lough Neagh & Lough Beg Special Protection Area (SPA)
- Lough Neagh & Lough Beg Ramsar Site

2.3.2 The Town Centres considered within the Plan are located within the Neagh Bann River Basin District which also represents the Zone of Influence within which hydrological impacts have the potential to affect the designated Ramsar and Natura 2000 sites (See Appendix 7 for a note on

Zones of Influence). There is a direct hydrological link between the Plan area and Lough Neagh. The River Bann flows through Portadown Town Centre into Lough Neagh. The Closet and Pound Rivers drain the Central Craigavon area and Lurgan is drained by a small stream flowing into Kinnegoe Bay. Furthermore, sewerage which is treated at Ballynacor Waste Water Treatment Works (WWTW) is pumped directly into Derryadd Bay in Lough Neagh.

- 2.3.3 The Lough Neagh & Lough Beg SPA and Ramsar Site are to the north of the Craigavon Town Centre Plan Area. The Ramsar boundary is, in general, more extensive than the SPA. The SPA / Ramsar sites are shown in Maps 1 and 2, Appendix 8.
- 2.3.4 A check has been made of other designated sites, which are outside the Plan Area which could be impacted upon by the Plan Proposals. The Bann Estuary Special Area of Conservation (SAC) was considered, but adjudged to be too remote from the Plan Area to be likely to have anything other than *de minimis* impact. It has been deemed that there are no other sites which are likely to be adversely impacted outside of those named above. This decision has been taken on the basis that there are no Plan Proposals that would result in the loss, fragmentation, disruption, disturbance or change to key elements of a Natura 2000 / Ramsar site within any Council area other than the Craigavon Borough. The condition of the sites is monitored on a regular basis by Natural Heritage, Environment & Heritage Service.

2.4 Description of the Natura 2000 and Ramsar Sites

2.4.1 Lough Neagh & Lough Beg SPA and Ramsar Site

Lough Neagh is the largest freshwater lake in the UK. It is a large, shallow, eutrophic lake. The SPA and Ramsar sites also include the smaller lakes, Lough Beg and Portmore Lough. The SPA supports internationally important numbers of wintering waterfowl and is internationally important for a number of wildfowl species including Whooper Swan, Bewick's Swan, Pochard, Tufted Duck, Scaup and Goldeneye. It is also internationally important for breeding Common Tern.

- 2.4.2 The site is recognised as a Ramsar site because it is a particularly good representative example of natural or near-natural wetlands, being a relatively shallow body of water supporting beds of submerged aquatic vegetation fringed by associated species-rich damp grassland, reedbeds, islands, fens, marginal swampy woodland and pasture.

- 2.4.3 The site supports over 40 rare or local vascular plants which have been recorded for the site since 1970 and is of special value for maintaining the genetic and ecological diversity of the region because of the quality and peculiarities of its flora and fauna. The site regularly supports substantial numbers of individuals from particular groups of waterfowl which are

indicative of wetland values, productivity and diversity. In addition this site is of special value as the habitat of plants or animals at a critical stage of their biological cycles. The site supports an important assemblage of breeding birds and supports a population of pollan *Coregonus autumnalis*, one of the few locations in Ireland.

- 2.4.4 The site's integrity is subject to pressures including water abstraction, pollution, eutrophication and recreational use.
- 2.4.5 The 2004/05 Condition Assessment Report (see Appendix 6) on the SPA site indicates that it is in unfavourable condition. The unfavourable status is due to declines in the following species: Bewick Swan, Pochard, Shoveler, Tufted Duck, breeding Common Terns and the total Waterfowl assemblage. For some species, the declines do not parallel wider UK and European trends but may be influenced by changes in migration patterns. It is therefore unclear whether the declines are due to site specific factors. EHS will ensure monthly counts (September-March) are undertaken. If after 3 years waterfowl numbers are unfavourably out of step with regional and national trends for component species, a programme to consider and assess potential within-site factors will be commenced.

2.5 Test of Likely Significance (TOLS)

- 2.5.1 **The Draft Plan and the PAC Recommendations have been tested for likely direct, indirect and cumulative impact, alone and in combination on the Natura 2000 and Ramsar sites.**
- 2.5.2 The TOLS was carried out to establish whether the Draft Plan Proposals would have a likely significant impact on the conservation objectives of the Natura 2000 site or the feature criteria of the Ramsar site.
- 2.5.3 The individual Draft Plan Proposals were tested in combination with the PAC recommendations. Other plans and projects which in combination with the Plan might be likely to affect the Natura 2000 sites were also identified for the purposes of the TOLS (Appendix 1). The TOLS is formatted in 'matrix' style (Appendix 2) and each policy group is assessed against the conservation objectives of the Natura site and selection features of the Ramsar site. Appendices 4 and 5 contain the conservation objectives for the Natura 2000 site and Ramsar Information Sheet respectively. The rationale for the TOLS matrix scores is explained in Appendix 3.
- 2.5.4 **Plan elements likely to directly impact on Natura 2000 sites**
There are no Plan proposals that directly have a negative impact on any of the Natura 2000 sites. However, a number of individual Plan Proposals were identified as having potential to have an indirect impact, either alone, cumulatively, or in combination on one or more of the aforementioned Natura 2000 sites.

2.5.5 Likely Indirect Impacts on the Natura 2000 sites (alone or in combination)

- Commercial or domestic emissions to water courses upstream of, or directly into a site from within the Craigavon Borough Council area

2.5.6 Likely changes to the Natura 2000 sites

The physical changes that will flow from the Plan will include development proposals within the three Town centres. This will include discharges to water courses upstream of the designated Lough Neagh sites.

2.5.7 Resources required to implement the Plan will include; water abstraction, waste water treatment capacity, stone / aggregates, waste disposal, energy, machinery and manpower (not an exhaustive list).

2.5.8 Likely forces for change to Natura 2000 and Ramsar sites, either as a result of the impact of the Plan alone or in combination with other plans, are as follows:

- ***Lough Neagh & Lough Beg SPA and Ramsar site:*** possible water borne pollution from upstream in the Lough Neagh watershed in combination with pollution from elsewhere in the Lough's watershed causing pollution / eutrophication and consequent knock on effects on flora and fauna, and vertebrate and invertebrate availability to waterfowl.

2.5.9 Result of the Test of Likely Significance

The plan policies have been tested against the conservation objectives/ selection criteria for Lough Neagh and Lough Beg. The results of this test are displayed in 'matrix' form in Appendix 2. Each policy was scored as either: 'likely significant impact', 'no significant impact' or 'uncertain'.

2.5.10 Findings and Conclusion of the Test of Likely Significance

No likely significant impact on the Lough Neagh & Lough Beg Natura 2000 and Ramsar sites has been found to result from the Craigavon Town Centre Boundaries and Retail Designations Plan 2010 and the PAC recommendations, alone or in combination with any other Plan or Policy.

3.0 STAGE TWO – FINDING OF NO LIKELY SIGNIFICANT EFFECTS REPORT

3.1 Finding of No Likely Significant Effects in respect of the Draft Plan Proposals and PAC Recommendations alone.

- 3.1.1 The likely impact of the Strategy, Policies and Designations in the Draft Plan were tested against the designation features of the Natura 2000 and Ramsar sites Lough Neagh and Lough Beg.
- 3.1.2 The Retail Strategy and Policy R1 were proposed to promote Lurgan and Portadown town centres as the main foci for additional retail capacity, and the maintenance of existing retail activity levels at Central Craigavon town centre. The PAC has recommended that the Retail Strategy and Policy R1 be removed from the Plan and that the provisions of PPS5: Retailing and Town Centres provide the policy framework within all three town centres. Whilst it is considered that this policy change may have an impact on the distribution and nature of retail development within the three centres it is unlikely to influence the overall scale of development. As a consequence this policy amendment is unlikely to make any significant change to the environmental impact of the overall plan proposals.
- 3.1.3 The Plan designations 1, 2 and 3 identify the Town Centre, Primary Retail Core and Primary Retail Frontage boundaries for Lurgan and Portadown, and Town Centre and Primary Retail Core boundaries for Central Craigavon. The designations and policies provide a framework within which the Craigavon Area Plan 2010 and regional planning policy PPS 5 may be given effect within these town centres. It is recognised that the Plan Area falls wholly within the existing built up area of Craigavon. The impact of the Plan is predominantly in setting the parameters for managing the development of retail businesses and other suitable town centre uses which would be anticipated within the commercial centres of the existing urban area. There is considered to be no significant impact in relation to the specific boundary changes recommended by the PAC.
- 3.1.4 As such, in considering the likely significant impact of the Plan on the designated Natura 2000 and Ramsar sites, it is considered that, because the purpose of the Plan is predominantly to manage development to protect the viability and vitality of existing central urban areas, there is no likely significant environmental impact resulting from either the identification of the Town Centre boundaries and Retail Designations or Policy R2, as the potential for waterborne run-off is considered as likely to be de minimis and the upgraded Ballynacorr WWTW will have the capacity to deal with any anticipated increase in sewerage discharge.
- 3.1.5 Consequently, it is considered that within and beyond the plan period there will be no likely significant impact on the Lough Neagh and Lough

Beg Natura 2000 and Ramsar sites and it is therefore not necessary to carry out an Appropriate Assessment.

3.2 Finding of No Likely Significant Effects in respect of the Plan Proposals and the PAC Recommendations in combination with the Craigavon Area Plan 2010 and regional planning policy.

- 3.2.1 The likely impact of the Plan and PAC Recommendations in combination with all relevant plans and policies was tested against the designation features of the Lough Neagh and Lough Beg Natura 2000 and Ramsar sites. The assessment primarily considered the possible impact on the aquatic environment due to the hydrological link to the designated sites and the designated town centres of Portadown, Lurgan and Craigavon. The carrying capacity of the WWTWs serving the whole Craigavon Borough Council Area was considered.
- 3.2.2 Water Management Unit (EHS) have been consulted and have stated that the Ballynacorr WWTW is currently being upgraded and is due to be completed by the end of 2008. The upgraded works is designed to serve and treat sewerage from a population equivalent (p/e) of 130,887. The current loading is approximately 116,400.
- 3.2.3 Housing land zonings have been closely monitored by Planning Service, since adoption of the Craigavon Area Plan in 2004, through its annual Housing Land Availability Monitor. The most recently published housing monitor report indicates that annual build rates in the Craigavon Urban Area are currently running at approximately 670 dwellings a year (and are forecast to fall). On the basis of average housing densities and the Northern Ireland Statistics Research Agency (NISRA) projections for mean household sizes it is clear that there will be adequate p/e capacity within the upgraded Ballynacorr WWTW to cope with any anticipated additional loading until well beyond 2010, the end date of the Plan.
- 3.2.4 It is considered that, within and beyond the plan period of the Craigavon Area Plan 2010 and the Craigavon Town Centre Boundaries & Retail Designations Plan 2010, there will be no likely significant impact on the Lough Neagh and Lough Beg Natura 2000 and Ramsar sites and it is therefore not necessary to carry out an Appropriate Assessment.

4.0 OVERALL CONCLUSIONS

- 4.1 Area Plans sit within an overarching hierarchy of regional planning policy which includes the RDS, A Planning Strategy for Rural Northern Ireland and various Planning Policy Statements (PPSs). The Area Plan cannot be implemented in isolation from regional planning policy and for the purposes of this Article 6 Assessment the Plan was assessed in combination with Craigavon Area Plan 2010 and regional planning policy. In this instance relevant regional planning policy includes PPS2: Planning and Nature Conservation, PPS5: Retailing and Town Centres, and PPS15: Planning and Flood Risk.
- 4.2 Loughs Neagh and Beg are currently in a hyper-eutrophic condition. Any additional nutrient loading is likely to worsen this condition and adversely affect plant life and fauna.
- 4.3 It is noted from the Water Framework Directive Summary Report of the characterisation and impact analysis required by Article 5, Northern Ireland, March 2005, that all of Lough Neagh surface water quality is 'at risk' from diffuse pollution sources and also 'at risk' in the southern reaches from point source pollution pressures. In addition, the Upper Bann River is 'at risk' from both point and diffuse source pollution pressures.
- 4.4 It is considered that waterborne pollution is the only potentially adverse effect likely to impact on the Lough Neagh and Lough Beg Natura 2000 and Ramsar sites as a result of the implementation of the Plan when considered alone or in combination with the Craigavon Area Plan 2010.
- 4.5 The Craigavon Borough area is currently served by three WWTWs, namely; Ballynacorr, Bullay's Hill and Seagoe. Northern Ireland Water (NIW) has reviewed the sewerage strategy for Craigavon Borough in the light of increased loadings and new treatment standards. Ballynacorr is currently being upgraded to deal with the predicted loadings for the Greater Craigavon Area and Bullay's Hill and Seagoe treatment works will be downgraded to storm water centres and their current inflows transferred to an upgraded Ballynacorr for final treatment.
- 4.6 Waste Water Treatment Works within Craigavon Borough will service developments in the Craigavon Town Centre area.
- 4.7 Ballynacorr WWTW has an actual population equivalent of 50,000 persons. Bullay's Hill WWTW has an actual population equivalent of 45,000. The Seagoe WWTW has an actual population equivalent of 21,400 persons. This amounts to a total of 116,400 persons. The Ballynacorr WWTW is currently being upgraded to a p/e capacity of 130,887 which will result in a spare p/e capacity of 14,487.

- 4.8 Completion of these upgrading works will enable the system to cope with any anticipated increase in loading until well beyond 2010, the end date of the Plan. Upgrading work has commenced and is due to be completed by the end of 2008.
- 4.9 As a result, it is judged that the Plan, in combination with the Craigavon Area Plan 2010 and regional planning policy is not likely to result in any significant additional pollution of the Lough's water quality and as a result will not have a significant impact on the features of Lough Neagh and Lough Beg Natura 2000 and Ramsar sites.
- 4.10 Consequently a '**Finding of no likely significant effects**' has been recorded.

APPENDIX 1: Reference Sources

Area Plan Documents

- Craigavon Area Plan 2010

Regional Planning Documents

- Regional Development Strategy for Northern Ireland 2025
- A Planning Strategy for Rural Northern Ireland
- Planning Policy Statements

Natural Heritage Documents

- Conservation Objectives for Lough Neagh & Lough Beg SPA

JNCC Documents

- Information Sheet on Ramsar Wetlands. Lough Neagh & Lough Beg

Other Documents

- Directive 2204/35/CE on environmental liability with regard to the prevention and remedying of environmental damage
- Lough Neagh Management Strategy 2002
- Managing the Water Environment in Northern Ireland 2000 (EHS)
- Proposals for the increased Water Supply Abstraction from Lough Neagh 2005-2015 (Water Service)
- Proposed Lough Neagh (levels) scheme 2004 (DARD)
- Regulation of Water Service Discharges Report for the year 2002/2003 (DOE)
- Spatial Environmental data and Ordinance Survey Maps within Natural Heritage's (EHS) Geographical Information Systems
- Water Framework Directive, Summary report of the characterisation and impact analyses required by Article 5 Northern Ireland (EHS)
- Water (Northern Ireland) Order 1999
- Water Pollution Incidents and Enforcement 2004 (EHS)
- Water Quality and Planning Table April 2006 (EHS)
- Water Resource Strategy 2005-2015
- Natura 2000 Sites Stage 1 Screening test of Likely Significance. Report on the Likely Significant Effects from Wastewater Treatment Works (WWTWs) on Lough Neagh & Lough Beg SPA. June 2007. (Northern Ireland Water)

Appendix 2

TOLS Matrix

TOLS Matrix for Draft Plan proposals in combination with PAC Recommendations

Policy Groups	1	2	3	4	5
Natura 2000 Sites					
Lough Neagh & Lough Beg SPA	X	X	X	X	X
Lough Neagh & Lough Beg Ramsar	X	X	X	X	X

Plan Proposals

- 1 Designation 1 (Town Centre Boundaries)
- 2 Designation 2 (Primary Retail Core 1)
- 3 Designation 3 (Primary Retail Frontages)
- 4 Policy R2 (Primary Retail Frontages)
- 5 In combination impact

Scoring: ? = impact uncertain or significant, x = no likely significant impact
 √ = likely significant positive impact

APPENDIX 3

3.0 Conservation Objectives

3.1 Lough Neagh & Lough Beg SPA

Feature	Component Objective
Common Tern breeding population	No significant decrease in population against national trends, caused by on-site factors
Common Tern breeding population	Fledging success
Great Crested Grebe breeding population	No significant decrease in population against national trends, caused by on-site factors
Great Crested Grebe breeding population	Fledging success
Great Crested Grebe passage population	No significant decrease in population against national trends, caused by on-site factors
Whooper Swan wintering population	No significant decrease in population against national trends, caused by on-site factors
Bewick's Swan wintering population	No significant decrease in population against national trends, caused by on-site factors
Golden Plover wintering population	No significant decrease in population against national trends, caused by on-site factors
Great Crested Grebe wintering population	No significant decrease in population against national trends, caused by on-site factors
Pochard wintering population	No significant decrease in population against national trends, caused by on-site factors
Tufted Duck wintering population	No significant decrease in population against national trends, caused by on-site factors
Scaup wintering population	No significant decrease in population against national trends, caused by on-site factors
Goldeneye wintering population	No significant decrease in population against national trends, caused by on-site factors
Little Grebe wintering population	No significant decrease in population against national trends, caused by on-site factors
Cormorant wintering population	No significant decrease in population against national trends, caused by on-site factors
Greylag Goose wintering population	No significant decrease in population against national trends, caused by on-site factors

Feature	Component Objective
Shelduck wintering population	No significant decrease in population against national trends, caused by on-site factors
Wigeon wintering population	No significant decrease in population against national trends, caused by on-site factors
Gadwall wintering population	No significant decrease in population against national trends, caused by on-site factors
Teal wintering population	No significant decrease in population against national trends, caused by on-site factors
Mallard wintering population	No significant decrease in population against national trends, caused by on-site factors
Shoveler wintering population	No significant decrease in population against national trends, caused by on-site factors
Coot wintering population	No significant decrease in population against national trends, caused by on-site factors
Lapwing wintering population	No significant decrease in population against national trends, caused by on-site factors
Waterfowl Assemblage wintering population	No significant decrease in population against national trends, caused by on-site factors
Waterfowl Assemblage wintering population	Maintain species diversity contributing to the Waterfowl Assemblage
Habitat	To maintain or enhance the area of natural and semi-natural habitats potentially usable by Feature bird species subject to natural processes
Habitat	Maintain the extent of main habitat components subject to natural processes
Habitat	Maintain or enhance sites utilised as roosts

APPENDIX 4

Ramsar Information Sheet: UK12016 Page 1 of 10 Lough Neagh and Lough Beg
Produced by JNCC: Version 3.0, 08/05/2006

Information Sheet on Ramsar Wetlands (RIS)

Categories approved by Recommendation 4.7, as amended by Resolution VIII.13 of the Conference of the Contracting Parties.

Note for compilers:

1. The RIS should be completed in accordance with the attached *Explanatory Notes and Guidelines for completing the Information Sheet on Ramsar Wetlands*. Compilers are strongly advised to read this guidance before filling in the RIS.
2. Once completed, the RIS (and accompanying map(s)) should be submitted to the Ramsar Secretariat. Compilers are strongly urged to provide an electronic (MS Word) copy of the RIS and, where possible, digital copies of maps.

1. Name and address of the compiler of this form:

Joint Nature Conservation Committee

Monkstone House

City Road

Peterborough

Cambridgeshire PE1 1JY

UK

Telephone/Fax: +44 (0)1733 – 562 626 / +44 (0)1733 – 555 948

Email: RIS@JNCC.gov.uk

2. Date this sheet was completed/updated:

Designated: 05 January 1976

3. Country:

UK (Northern Ireland)

4. Name of the Ramsar site:

Lough Neagh and Lough Beg

5. Map of site included:

Refer to Annex III of the *Explanatory Notes and Guidelines*, for detailed guidance on provision of suitable maps.

a) hard copy (required for inclusion of site in the Ramsar List): yes -or- no

b) digital (electronic) format (optional): Yes

6. Geographical coordinates (latitude/longitude):

54 34 11 N 06 24 34 W

7. General location:

Include in which part of the country and which large administrative region(s), and the location of the nearest large town.

Nearest town/city: Belfast

Lough Neagh is situated in the centre of Northern Ireland. It is the largest freshwater lake in the United Kingdom, covering an area of 383 square km, with a longest length of 30.5 km and narrowest width of 12.1 km across the middle.

Administrative region: Antrim; Armagh; Ballymena; Cookstown; Craigavon; Down; Dungannon; Lisburn; Londonderry; Magherafelt; Tyrone

8. Elevation (average and/or max. & min.) (metres):

Min. - 0

Max. - 20

Mean - 0

9. Area (hectares): 50165.84

10. Overview:

Provide a short paragraph giving a summary description of the principal ecological characteristics and importance of the wetland.

Lough Neagh is situated in the centre of Northern Ireland. It is the largest freshwater lake in the United Kingdom covering an area of 383 km² with a longest length of 30.5 km and narrowest width of 12.1 km across the middle. The lake is very shallow for its size, with a mean depth of 8.9 metres.

At its deepest point it extends down to 34 metres. The 125 km shoreline is mostly exposed with wavebeaten rocks and stones but there are also some sheltered, sandy bays with better-developed marginal vegetation including some reedbeds.

This site also contains a smaller lake, Lough Beg (1,125 ha) to the north, as well as a small satellite lake, Portmore Lough (286 ha) which is situated to the east of Lough Neagh. Lough Beg (meaning 'little lough') is essentially a widening of the Lower Bann River just downstream from where it leaves Lough Neagh. Lough Beg is very shallow, with a mean depth of 1-2 metres and a surface area of km².

About 200 hectares of the west shore is unimproved wet grassland that is largely inundated with floodwater each winter.

Rivers flowing into Lough Neagh drain about 43% of Northern Ireland, plus part of County Monaghan in the Republic of Ireland.

11. Ramsar Criteria:

Highlight each Criterion applied to the designation of the Ramsar site. See Annex II of the *Explanatory Notes and Guidelines* for the Criteria and guidelines for their application (adopted by Resolution VII.11).

1, 2, 3, 4, 5, 6

12. Justification for the application of each Criterion listed in 11. above:

Provide justification for each Criterion in turn, clearly identifying to which Criterion the justification applies (see Annex II for guidance on acceptable forms of justification).

Ramsar criterion 1

A particularly good representative example of natural or near-natural wetlands, common to more than one biogeographic region.

The site is the largest freshwater lake in the United Kingdom. Lough Neagh a relatively shallow body of water supporting beds of submerged aquatic vegetation fringed by associated species-rich damp grassland, reedbeds, islands, fens, marginal swampy woodland and pasture. Other interesting vegetation types include those associated with pockets of cut-over bog, basalt rock outcrops and boulders, and the mobile sandy shore.

Ramsar criterion 2

Supports an appreciable assemblage of rare, vulnerable or endangered species or sub-species of plant or animal or an appreciable number of individuals of any one of these species.

The site supports over 40 rare or local vascular plants which have been recorded for the site since 1970; the most notable are eight-stamened waterwort *Elatine hydropiper*, marsh

pea *Lathyrus palustris*, Irish lady's tresses *Spiranthes romanoffiana*, alder buckthorn *Frangula alnus*, narrow small-reed *Calamagrostis stricta* and holy grass *Hierochloa odorata*. The Lough and its margin are also home to a large number of rare or local invertebrates, including two aquatic and two terrestrial molluscs, a freshwater shrimp *Mysis relicta*, eight beetles, five hoverflies, seven moths and two butterflies. Of the rare beetles recorded two, *Stenus palposus* and *Dyschirius obscurus*, have their only known Irish location around the Lough. The Lough also supports twelve species of dragonfly.

Ramsar criterion 3

This site is of special value for maintaining the genetic and ecological diversity of a region because of the quality and peculiarities of its flora and fauna.

The site regularly supports substantial numbers of individuals from particular groups of waterfowl which are indicative of wetland values, productivity and diversity. In addition, this site is of special value for maintaining the genetic and ecological diversity of Northern Ireland because of the quality and peculiarities of its flora and fauna. A large number of plants and animal species are confined or almost confined to this area within Northern Ireland.

Ramsar criterion 4

This site is of special value as the habitat of plants or animals at a critical stage of their biological cycles.

The site supports an important assemblage of breeding birds including the following species with which occur in nationally important numbers: great crested grebe *Podiceps cristatus*, gadwall *Anas strepera*, pochard *Aythya ferina*, tufted duck *Aythya fuligula*, snipe *Gallinago gallinago* and redshank *Tringa totanus*. Other important breeding wetland species include shelduck *Tadorna tadorna*, teal *Anas crecca*, shoveler *Anas clypeata*, lapwing *Vanellus vanellus* and curlew *Numenius arquata*.

Assemblages of international importance:

Species with peak counts in winter:

86639 waterfowl (5 year peak mean 1998/99-2002/2003)

Ramsar criterion 6

Species / populations occurring at levels of international importance.

Qualifying Species/populations (as identified at designation):

Species with peak counts in spring/autumn:

Tundra swan, *Cygnus columbianus bewickii*, NW Europe - 26 individuals, representing an average of 0.1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Whooper swan, *Cygnus cygnus*, Iceland/UK/Ireland - 1523 individuals, representing an average of 7.2% of the population (5 year peak mean 1998/9-2002/3)

Common pochard, *Aythya ferina*, NE & NW Europe - 20279 individuals, representing an average of 5.7% of the population (5 year peak mean 1998/9-2002/3)

Tufted duck, *Aythya fuligula*, NW Europe - 17807 individuals, representing an average of 1.4% of the population (5 year peak mean 1998/9-2002/3)

Greater scaup, *Aythya marila marila*, W Europe - 3377 individuals, representing an average of 1% of the population (5 year peak mean 1998/9-2002/3)

Common goldeneye, *Bucephala clangula* - 6645 individuals, representing an average of 1.6% of the population (5 year peak mean *clangula*, NW & C Europe 1998/9-2002/3)

Species/populations identified subsequent to designation for possible future consideration under criterion 6.

Species with peak counts in spring/autumn:

Great cormorant *Phalacrocorax carbo carbo*, NW Europe - 1628 individuals, representing an average of 1.3% of the population (5 year peak mean 1998/9-2002/3)

Mute swan, *Cygnus olor*, Britain - 1874 individuals, representing an average of 4.9% of the population (5 year peak mean 1998/9-2002/3)

Contemporary data and information on water bird trends at this site and their regional (sub-national) and national contexts can be found in the Wetland Bird Survey report, which is updated annually. See www.bto.org/survey/webs/webs-alerts-index.htm.

See Sections 19/20 for details of noteworthy species

Details of bird species occurring at levels of National importance are given in Section 20 Ramsar criterion 7

The site supports a population of pollan *Coregonus autumnalis*, one of the few locations in Ireland and one of the two known locations in the UK (the other is Lower Lough Erne).

It is one of the most important species in Ireland in terms of faunal biodiversity since it occurs nowhere else in Europe, and the Irish populations are all well outside the typical range – the Arctic Ocean drainages of Siberia, Alaska and north-western Canada, where it is known as the Arctic cisco.

Ramsar criterion 5

13. Biogeography (required when Criteria 1 and/or 3 and /or certain applications of Criterion 2 are applied to the designation):

Name the relevant biogeographic region that includes the Ramsar site, and identify the biogeographic regionalisation system that has been applied.

a) biogeographic region:

Atlantic

b) biogeographic regionalisation scheme (include reference citation):

Council Directive 92/43/EEC

14. Physical features of the site:

Describe, as appropriate, the geology, geomorphology; origins - natural or artificial; hydrology; soil type; water quality; water depth, water permanence; fluctuations in water level; tidal variations; downstream area; general climate, etc.

Soil & geology - sand, clay, peat, basalt

Geomorphology and landscape - lowland, floodplain

Nutrient status - highly eutrophic

pH - no information

Salinity - fresh

Soil - no information

Water permanence - usually permanent

Summary of main climatic features - Annual averages (Aldergrove 1971–2000) (www.metoffice.com/climate/uk/averages/19712000/sites/aldergrove.html)

Max. daily temperature: 12.5° C

Min. daily temperature: 5.8° C

Days of air frost: 39.1

Rainfall: 862.4 mm

Hrs. of sunshine: 1313.7

General description of the Physical Features:

Lough Neagh is the largest freshwater lake in the UK, covering an area of 383 sq. km.

The lough is very shallow for its size with a mean depth of 8.9 m (at deepest only 34 m).

The 125km shoreline is mostly exposed with wave-beaten rocks and stones but there are also some sheltered, sandy bays with better-developed marginal vegetation including some reedbeds.

The smaller Lough Beg (covering 1,125 ha) to the north is essentially a widening of the Lower Bann River downstream of its exit from Lough Neagh, and is very shallow, with a mean depth of 1-2 m. About 200 ha of the west shore is unintensified wet grassland that is largely inundated with floodwater each winter.

15. Physical features of the catchment area:

Describe the surface area, general geology and geomorphological features, general soil types, general land use, and climate (including climate type).

Lough Neagh is situated in the centre of Northern Ireland. It is the largest freshwater lake in the British Isles and is very shallow for its size. Six major rivers flow into the Lough while the Lower Bann River provides the exit, carrying water from the north end of the Lough at Toome to the sea on the north coast of Northern Ireland. The rivers flowing into Lough Neagh drain about 43% of Northern Ireland, plus part of County Monaghan in the Republic of Ireland. There is no incursion of seawater into Lough Neagh.

Lough Beg and Portmore Lough are two smaller lakes associated with Lough Neagh.

Lough Beg (1,125 ha) lies to the north of Lough Neagh at the start of the Lower Bann River and Portmore Lough (286 ha) flows into the south-east of Lough Neagh.

16. Hydrological values:

Describe the functions and values of the wetland in groundwater recharge, flood control, sediment trapping, shoreline stabilization, etc.

Flood water storage / desynchronisation of flood peaks

17. Wetland types

Inland wetland

Code Name % Area

O Freshwater lakes: permanent 77.6

U Peatlands (including peat bogs swamps, fens) 4

W Shrub-dominated wetlands 2.1

Other Other 16

Xp Forested peatland 0.3

18. General ecological features:

Provide further description, as appropriate, of the main habitats, vegetation types, plant and animal communities present in the Ramsar site.

Most of the shoreline and shallow margin of the Lough is exposed to wave action and has a rocky or sandy character. The submerged and floating aquatic vegetation is confined to sheltered bays and inlets and includes very extensive stands of fennel-leaved pondweed *Potamogeton pectinatus* and slender-leaved pondweed *P. filiformis* intermixed with smaller quantities of additional species. Swamp vegetation generally consists of a mosaic of small stands of common spike-rush *Eleocharis palustris*, reedmace *Typha latifolia*, branched bur-reed *Sparganium erectum*, flowering rush *Butomus umbellatus*, bulrush *Scirpus lacustris* and bottle sedge *Carex rostrata*. Locally, large stands of common reed *Phragmites australis* have developed. The tall fen occurring along the water's edge mostly consists of a thin, generally species-poor band of reed canary-grass *Phalaris arundinacea*, hemlock water dropwort *Oenanthe crocata*, yellow loosestrife *Lysimachia vulgaris* and purple loosestrife *Lythrum salicaria*, but in places there are a number of more uncommon plant species.

Some of the Lough shore is fringed by a fragmented, swampy woodland of alder *Alnus glutinosa* and willow *Salix* species related to successive lowerings of water-levels. This woodland is among the best of its type in Northern Ireland. It is extensive and locally contains a diversity of plants including many notable species. The remainder of the shore is mostly covered by a variety of grassland types ranging from improved and reseeded grassland to species-rich hay meadows, with the most characteristic type being wet marshy grassland with soft rush *Juncus effusus* and brown sedge *Carex disticha* as the most prominent species.

19. Noteworthy flora:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Nationally important species occurring on the site. Higher Plants.

Elatine hydropiper, Spiranthes romanzoffiana, Calamagrostis stricta, Hierochloa odorata, Mentha pulegium, Lathyrus palustris, Frangula alnus, Carex elongata

20. Noteworthy fauna:

Provide additional information on particular species and why they are noteworthy (expanding as necessary on information provided in **12**. Justification for the application of the Criteria) indicating, e.g. which species/communities are unique, rare, endangered or biogeographically important, etc., including count data. *Do not include here taxonomic lists of species present – these may be supplied as supplementary information to the RIS.*

Birds

Species currently occurring at levels of national importance:

Species regularly supported during the breeding season:

Black-headed gull, *Larus ridibundus*, N & C Europe - 3269 apparently occupied nests, representing an average of 6% of the all-Ireland population (Seabird 2000 Census)

Lesser black-backed gull, *Larus fuscus graellsii*, W Europe/Mediterranean/W Africa - 451 apparently occupied nests, representing an average of 8.6% of the all-Ireland population (Seabird 2000 Census)

Common tern, *Sterna hirundo hirundo*, N & E Europe - 93 apparently occupied nests, representing an average of 3% of the all-Ireland population (Seabird 2000 Census)

Species with peak counts in spring/autumn:

Great crested grebe, *Podiceps cristatus cristatus*, NW Europe - 1227 individuals, representing an average of 35% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Gadwall, *Anas strepera strepera*, NW Europe - 126 individuals, representing an average of 21% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Mallard, *Anas platyrhynchos platyrhynchos*, NW Europe - 5136 individuals, representing an average of 10.2% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Red-breasted merganser, *Mergus serrator*, NW & C Europe - 25 individuals, representing an average of 1.2% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Common coot, *Fulica atra atra*, NW Europe - 5680 individuals, representing an average of 22.7% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Lesser black-backed gull, *Larus fuscus graellsii*, - 1174 individuals, representing an average of 1.6% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Species with peak counts in winter:

Little grebe , *Tachybaptus ruficollis ruficollis*, Europe to E Urals, NW Africa - 355 individuals, representing an average of 7.1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Common shelduck, *Tadorna tadorna*, NW Europe - 138 individuals, representing an average of 1.9% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Eurasian wigeon, *Anas penelope*, NW Europe - 3012 individuals, representing an average of 2.4% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Eurasian teal , *Anas crecca*, NW Europe - 1878 individuals, representing an average of 2.8% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

European golden plover, *Pluvialis apricaria apricaria*, P. a. altifrons Iceland & Faroes/E Atlantic - 8249 individuals, representing an average of 4.1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Northern lapwing , *Vanellus vanellus*, Europe–breeding - 10968 individuals, representing an average of 4.3% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Mew gull , *Larus canus canus*, Europe to N Africa - 765 individuals, representing an average of 1.1% of the all-Ireland population (5 year peak mean 1998/9-2002/3)

Species Information Assemblage.

During the breeding season the site supports a diverse assemblage of waterfowl, including: *Larus ridibundus*, *Podiceps cristatus*, *Anas strepera*, *Tringa totanus*, *Gallinago gallinago*, *Aythya fuligula*, *Aythya ferina*, *Anas clypeata*, *Larus fuscus* and *Larus canus*. Pollan *Coregonus autumnalis*

21. Social and cultural values:

e.g. fisheries production, forestry, religious importance, archaeological sites, social relations with the wetland, etc. Distinguish between historical/archaeological/religious significance and current socio-economic values.

Aesthetic

Environmental education/ interpretation

Fisheries production

Livestock grazing

Non-consumptive recreation

Scientific research

Sport fishing

Sport hunting

Tourism

Traditional cultural

Transportation/navigation

22. Land tenure/ownership:

Ownership category On-site Off-site

Non-governmental organisation (NGO) +

Local authority, municipality etc. +

Private +

Public/communal +

23. Current land (including water) use:

Activity On-site Off-site

Nature conservation +

Tourism +

Recreation +

Current scientific research +

Fishing: commercial +
Fishing: recreational/sport +
Rough or shifting grazing +
Hunting: recreational/sport +
Sewage treatment/disposal +
Flood control +
Mineral exploration (excl. hydrocarbons) +
Domestic water supply +
Non-urbanised settlements +

24. Factors adversely affecting the site's ecological character, including changes in land (including water) use and development projects:

Explanation of reporting category:

- 1. Those factors that are still operating, but it is unclear if they are under control, as there is a lag in showing the management or regulatory regime to be successful.*
- 2. Those factors that are not currently being managed, or where the regulatory regime appears to have been ineffective so far.*

NA = Not Applicable because no factors have been reported.

Adverse Factor Category

Reporting Category

Description of the problem (Newly reported Factors only)

On-Site

Off-Site

Major Impact?

Eutrophication 2 The Lough drains some 40% of Northern Ireland and has been subject to severe eutrophication as a result of increased nutrient inputs from agricultural run-off and general domestic sewage from catchment housing and other developments. ++
Pollution – agricultural fertilisers 2 The Lough drains some 40% of Northern Ireland and has been subject to severe eutrophication as a result of increased nutrient inputs from agricultural run-off and general domestic sewage from catchment housing and other developments. ++

For category 2 factors only.

What measures have been taken / are planned / regulatory processes invoked, to mitigate the effect of these factors?

Eutrophication - Phosphate-stripping at appropriate sewage treatment works had begun to address the issue of eutrophication, but the nutrient problem has now been demonstrated to be predominantly due to non-point, agricultural, sources. Water Catchment Management Plan will be developed in context of the Water Framework Directive.

Pollution – agricultural fertilisers - Phosphate-stripping at appropriate sewage treatment works had begun to address the issue of eutrophication, but the nutrient problem has now been demonstrated to be predominantly due to non-point, agricultural, sources. Water Catchment Management Plan will be developed in context of the Water Framework Directive.

Is the site subject to adverse ecological change? YES

25. Conservation measures taken:

List national category and legal status of protected areas, including boundary relationships with the Ramsar site; management practices; whether an officially approved management plan exists and whether it is being implemented.

Conservation measure On-site Off-site Site/ Area of Special Scientific Interest (SSSI/ASSI) +

National Nature Reserve (NNR) +

Special Protection Area (SPA) +

Land owned by a non-governmental organisation for nature conservation +

Site management statement/plan implemented +

Special Area of Conservation (SAC) +

26. Conservation measures proposed but not yet implemented:

e.g. management plan in preparation; official proposal as a legally protected area, etc.

No information available

27. Current scientific research and facilities:

e.g. details of current research projects, including biodiversity monitoring; existence of a field research station, etc.

Fauna.

Numbers of migratory birds and wildfowl and waders are monitored annually as part of the national Irish Wetland Birds Survey (I-WEBS) organised by the IWC Birdwatch Ireland, the National Parks and Wildlife Service (Ireland) and the Wildfowl and Wetlands Trust.

Miscellaneous.

The University of Ulster has a freshwater research laboratory on the shores of Lough Neagh.

28. Current conservation education:

e.g. visitor centre, observation hides and nature trails, information booklets, facilities for school visits, etc.

The Lough Neagh Discovery Centre is located on the southern shores of Lough Neagh and is run by Craigavon Borough Council. School groups and other incidental visitors are also catered for at the nearby Environment and Heritage Service Warden's office/information centre.

29. Current recreation and tourism:

State if the wetland is used for recreation/tourism; indicate type(s) and their frequency/intensity.

Activities, Facilities provided and Seasonality.

There is regular use of parts of the site for informal recreation.

30. Jurisdiction:

Include territorial, e.g. state/region, and functional/sectoral, e.g. Dept. of Agriculture/ Dept. of Environment, etc.

Department of the Environment (Northern Ireland), Environment and Heritage Service, Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, Northern Ireland, BT7 2JA

31. Management authority:

Provide the name and address of the local office(s) of the agency(ies) or organisation(s) directly responsible for managing the wetland. Wherever possible provide also the title and/or name of the person or persons in this office with responsibility for the wetland.

Department of the Environment (Northern Ireland), Environment and Heritage Service, Klondyke Building, Cromac Avenue, Gasworks Business Park, Lower Ormeau Road, Belfast, Northern Ireland, BT7 2JA

32. Bibliographical references:

Scientific/technical references only. If biogeographic regionalisation scheme applied (see **13** above), list full reference citation for the scheme.

Site-relevant references

Cranswick, PA, Waters, RJ, Musgrove, AJ & Pollitt, MS (1997) *The Wetland Bird Survey 1995–96: wildfowl and wader counts*. British Trust for Ornithology, Wildfowl and Wetlands Trust, Royal Society for the Protection of Birds & Joint Nature Conservation Committee, Slimbridge

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Wood, RB & Smith, RV (eds.) (1993) *Lough Neagh: The ecology of a multipurpose water resource*. Kluwer, Dordrecht (Monographiae Biologicae, No. 69)

Wolfe-Murphy, SA, Lawrie, EW, Smith, SJ & Gibson, CE (1993) *Northern Ireland Lakes Survey*. Unpublished report to Northern Ireland Department of Environment, Countryside and Wildlife, Belfast

APPENDIX 5

Lough Neagh and Lough Beg SPA: Monitoring Report 2004/05

(Revised 2008 for features data-deficient in 2004/05) Date: 22/01/2008

Site Description:

Situated in the centre of Northern Ireland, Lough Neagh is the largest lake in the British Isles. The proposed Special Protection Area includes three eutrophic water bodies, Lough Neagh and two related loughs, Lough Beg and Portmore Lough together with surrounding swamp, fen, wet grassland and swampy woodland. The area of the site is 41,188 ha.

The boundary of the proposed Special Protection Area follows the boundaries of the Lough Neagh ASSI, Lough Beg ASSI and Portmore Lough ASSI. The site also forms part of a site listed as a wetland of international importance under the Ramsar Convention.

The site qualifies under Article 4.1 of EC Directive 79/409 by regularly supporting internationally important numbers of wintering Bewick's swan *Cygnus columbianus* and whooper swan *Cygnus cygnus*.

The site also qualifies under Article 4.1 by regularly supporting nationally important numbers of breeding common tern *Sterna hirundo* (200 pairs in 1995 which comprise 7.4% of Irish population). The site qualifies under Article 4.2 of the Directive as a wetland of international importance by regularly supporting over 20,000 waterfowl in winter. The five year peak mean for the period 1989/90 to 1993/94 was 79,915 birds including nationally and internationally important numbers of the following species: pochard *Aythya ferina*, tufted duck *Aythya fuligula*, goldeneye *Bucephala clangula*, little grebe *Tachybaptus ruficollis*, great crested grebe *Podiceps cristatus*, cormorant *Phalacrocorax carbo*, mute swan *Cygnus olor*, greylag goose *Anser anser*, shelduck *Tadorna tadorna*, wigeon *Anas penelope*, gadwall *Anas strepera*, teal *Anas crecca*, mallard *Anas platyrhynchos*, shoveler *Anas clypeata*, scaup *Aythya marila* and coot *Fulica atra*.

Monitoring:

Waterbird counts carried out monthly, September – March, as part of WeBS programme. Annual nest counts at tern colonies. Breeding waders and Great Crested Grebes censused at a sample of major sites every six years. Boat-based survey of breeding waterfowl every six years.

Current Condition of features:

based on five-year mean 1998/1999 - 2002/03 for wintering and passage waterfowl; 2000 – 2004 mean for terns; 2007 survey for breeding wader assemblage; 2006 survey for breeding waterfowl assemblage; 2007 survey for breeding Great Crested Grebe.

CSM baseline = lowest peak 1990/91 – 1996/97 (1993-1997 for terns)

Generic Threshold for breeding wader assemblage = mean of 1987 and 1992 survey totals for sample sites#.

Feature	% CSM Baseline	Current Status	Comments
Bewick's Swan	32	Unfavourable	General decline, UK medium WeBS alert (Austin et al 2004), large decline in EU (Papazoglou et al 2004)
Golden Plover	343	Favourable	
Goldeneye	90	Favourable	
Great Crested Grebe (B)		no data	
Great Crested Grebe (P)	73	Favourable	
Great Crested Grebe (W)	318	Favourable	
Pochard	81	Unfavourable	UK medium WeBS alert (Austin et al 2004), ; moderate decline in EU (Papazoglou et al 2004)
Scaup	247	Favourable	
Tufted Duck	87	Unfavourable	Stable in GB and Ireland (Pollitt et al 2003, Austin et al 2004; moderate decline in EU (Papazoglou et al 2004)
Whooper Swan	224	Favourable	
Waterfowl Assemblage***	94	Unfavourable	caused by diving duck decline
Common Tern (B)*	81	Unfavourable	recent NI increase, local status based on data of variable quality; ; stable in EU (Papazoglou et al 2004)

* tern counts have varied in coverage and accuracy

*** Waterfowl Assemblage = combined total of feature species listed above

Sample sites for breeding waders: Lough Beg NW, Lough Beg W, Kiltagh Pt.-Blacker's Rock, Kiltagh Pt.-Ardboe Pt., Killycolpy, Back Lower, Washing Bay, Collumbkille Pt., Reedy Flat, Three Islands.

Recommendations:

1. Decline of Bewick's Swan at this site parallels wider UK and European trends and therefore appears unlikely to be due to site specific factors. **Action:** Conservation Science to ensure monthly counts (September-March) are undertaken. If after 3 years the Bewick's Swan population is unfavourably out of step with regional and national trends, commence programme to consider and assess potential within-site factors.
2. Decline of Pochard at this site does not parallel wider UK and European trends but may be influenced by changes in migration patterns. It is therefore unclear whether the decline is due to site specific factors. **Action:** Conservation Science to ensure monthly counts (September-March) are undertaken. If after 3 years the Pochard population is unfavourably out of step with regional and national trends, commence programme to consider and assess potential within-site factors.
3. Decline of Tufted Duck at this site does not parallel wider European trends but may be influenced by changes in migration patterns. It is therefore unclear whether the decline is due to site specific factors. **Action:** Conservation Science to ensure monthly counts (September-March) are undertaken. If after 3 years the Tufted Duck population is unfavourably out of step with regional and national trends, commence programme to consider and assess potential within-site factors.
4. Decline of the waterfowl assemblage at this site is almost entirely attributable to the loss of diving ducks. Numbers of these species in some cases do not parallel wider UK and European trends but may be influenced by changes in migration patterns. It is therefore unclear if the decline in waterfowl is due to site specific factors. **Action:** Conservation Science to ensure monthly counts (September-March) are undertaken. If after 3 years waterfowl numbers are unfavourably out of step with regional and national trends for component species, commence programme to consider and assess potential within-site factors.
5. Decline of Common Tern at Lough Neagh is contrary to a general increase in Northern Ireland and may be an artifact of variable quality and coverage of monitoring in past years. **Action:** Conservation Science to ensure comprehensive annual monitoring of all tern colonies. If after 3 years the Common Tern population is significantly out of step with regional and national trends, commence programme to consider and assess potential within-site factors.

References:

Austin, G.E., Jackson, S.S.F. * Mellan, H.J. (2004) WeBS Alerts 2000/2001: Changes in numbers of wintering waterbirds in the United Kingdom, its Constituent Countries, Special Protection Areas (SPAs) and Sites of Special Scientific Interest (SSSIs). BTO Research Report 349. British Trust for Ornithology, Thetford.

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APPENDIX 6

Note on Zones of Influence (ZOI) in relation to Craigavon Town Centre Boundaries & Retail Designations Plan 2010

When ZOI are referred to in relation to Natura 2000 or Ramsar sites, what is meant is: an indicative area, surrounding and including the site, within which certain proposed developments or operations may have a likely impact on the integrity or conservation objectives of that particular site.

In essence, there are several ZOI for any one site. The ZOI for 'one-off' houses in the countryside is likely to be very different to a ZOI to show the area within which 'aerial deposition' may cause an impact.

In defining ZOI for Loughs Neagh and Beg designated sites in relation to the Plan area, the boundaries have been drawn up to reflect the Plan proposals/ policies which have developments and/ or operations most likely to cause an impact on a designated site.

Lough Neagh & Lough Beg SPA/ Ramsar site ZOI

In this case, the ZOI boundary for the designated Lough Neagh and Lough Beg sites is considered to be the area served by the Ballynacorr WWTW within which there is the potential for waterborne pollution caused as a result of development arising from the Craigavon Town Centre Boundaries & Retail Designations Plan 2010 alone or in combination with development within the Craigavon Area Plan 2010 (see Map 3 Appendix 8) This is considered in combination, and cumulatively, with other potentially polluting operations (eg. from septic tanks for 'one-off' housing in the countryside and from agricultural sources) and along with the potential effects of climate change and the possibility of heavier rainfall/ flooding etc in the future, to have the potential to impact on the water quality of the designated site.

Appendix 7: List of Acronyms

ASI	Area of Scientific Interest
ASSI	Area of Special Scientific Interest
DOS	Development Opportunity Site
DOE	Department of the Environment
DRD	Department for Regional Development
EC	European Community
EHS	Environment and Heritage Service
EHSWMU	Environment and Heritage Service: Water Management Unit
EIA	Environmental Impact Assessment
EU	European Union
HGI	Housing Growth Indicator
LCA	Landscape Character Areas
LNR	Local Nature Reserve
NI	Northern Ireland
NILCA	Northern Ireland Landscape Character Assessment
NISRA	Northern Ireland Statistics Research Agency
NNR	National Nature Reserve
ODPM	Office of the Deputy Prime Minister
p/e	population equivalent
PPS	Planning Policy Statement
PRC	Primary Retail Core
PRF	Primary Retail Frontage
PS	Planning Service
PSRNI	A Planning Strategy for Rural Northern Ireland
RDS	Regional Development Strategy
SAC	Special Area of Conservation
SEA	Strategic Environmental Assessment
SPA	Special Protection Area
TOLS	Test of Likely Significance
WeBS	Wetland Birds Survey
WWTW	Waste Water Treatment Works
ZOI	Zone of Influence

APPENDIX 8

£2.50

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