

# SEA STATEMENT

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FOR THE

## ATHY TOWN DEVELOPMENT PLAN 2012-2018

### STRATEGIC ENVIRONMENTAL ASSESSMENT



**for: Athy Town Council**

Rathstewart

Athy

County Kildare



**by: CAAS Ltd.**

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**MARCH 2012**

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# Section 1 Introduction

## 1.1 Terms of Reference

This is the SEA Statement for the Athy Town Development Plan 2012-2018 Strategic Environmental Assessment (SEA).

## 1.2 SEA Definition

SEA is a systematic process of predicting and evaluating the likely environmental effects of implementing a plan, or other strategic action, in order to ensure that these effects are appropriately addressed at the earliest appropriate stage of decision-making on a par with economic and social considerations.

## 1.3 Legislative Context

Directive 2001/42/EC of the European Parliament and of the Council, of 27 June 2001, on the assessment of the effects of certain plans and programmes on the environment, referred to hereafter as the SEA Directive, introduced the requirement that SEA be carried out on plans and programmes which are prepared for a number of sectors, including land use planning.

The SEA Directive was transposed into Irish Law through the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 435 of 2004) - as amended by European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011 (S.I. No. 200 of 2011) - and the Planning and Development (Strategic Environmental Assessment) Regulations 2004 (SI No. 436 of 2004) - as amended by Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011 (S.I. No. 201 of 2011).

The SEA Directive and the instruments transposing it into Irish Law require that after the adoption of a plan or programme, the plan or programme making authority make a Statement available to the public, the competent environmental authorities and, where relevant, neighbouring countries. This Statement is

referred to as an SEA Statement (DEHLG, 2004)<sup>1</sup>.

## 1.4 Content of the SEA Statement

The SEA Statement is required to include information summarising:

- a) How environmental considerations have been integrated into the Plan,
- b) How
  - the environmental report,
  - submissions and observations made to the planning authority on the Plan and Environmental Report, and
  - any transboundary consultations [this is not relevant to this SEA]have been taken into account during the preparation of the Plan,
- c) The reasons for choosing the Plan, as adopted, in the light of the other reasonable alternatives dealt with, and
- d) The measures decided upon to monitor the significant environmental effects of implementation of the Plan.

## 1.5 Implications of SEA for the Plan

The above legislation requires the Athy Town Development Plan to undergo SEA. The findings of the SEA were expressed in an Environmental Report which was submitted to the Elected Members alongside the Draft Plan.

The Environmental Report was updated by way of Addenda (see Section 3) to take account of amendments to the Plan arising from submissions and observations as well as modifications which were made to the Plan. On the adoption of the Plan, the Addenda were used to update the original Environmental Report into a final Environmental Report which is available alongside the Development Plan.

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<sup>1</sup> Department of the Environment, Heritage and Local Government (2004) *Implementation of SEA Directive (2001/42/EC): Guidelines for Regional Authorities and Planning Authorities* Dublin: Government of Ireland.

At each stage of the process the Elected Members took into account the findings of the Environmental Report and/or the Addenda as appropriate. It is noted that the Addenda also considered issues which were relevant to the Appropriate Assessment that was undertaken on the Plan.

## Section 2 How Environmental Considerations were integrated into the Development Plan

### 2.1 Consultations

As environmental authorities identified under the SEA Regulations, the Environmental Protection Agency (EPA), the Department of the Environment, Heritage and Local Government (DEHLG) and the Department of Communications, Energy and Natural Resources (DCENR)<sup>2</sup> were all sent SEA scoping notices indicating that submissions or observations in relation to the scope and level of detail of the information to be included in the environmental report could be made to Athy Town Council. Written submissions on the scope of the SEA were received from each of the environmental authorities and the information contained in these submissions - including that which related to Appropriate Assessment (AA) - was taken into account during the formulation of the scope of the SEA.

Representatives from the EPA, Athy Town Council, Kildare County Council and CAAS attended an SEA Scoping Meeting on the 3<sup>rd</sup> of November 2010. The information provided at the SEA Scoping meeting was used to update the Scoping Report and was taken into account during the formulation of the scope of the SEA.

In addition, submissions were made on both the Plan and the Environmental Report while they were on public display and on the Proposed Amendments and Addendum II to the Environmental Report while they were on public display. Further information on these is provided under Section 3.

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<sup>2</sup> The Marine function of the Department of Communications, Marine and Natural Resources has been transferred to the Department of Agriculture Food and Fisheries

### 2.2 Environmental Sensitivities

#### 2.2.1 Mapping and Early Communication

Environmental considerations were integrated into the Plan before it was placed on public display.

Environmental sensitivities were mapped in order to identify which parts of the Plan area and surrounding areas would be most sensitive to development and would suffer the most adverse effects if growth was to be accommodated in those areas unmitigated.

Environmental considerations were communicated to the Elected Members throughout the Plan preparation process through the Environmental Report, through Addenda to the Environmental Report and through a presentation on the Environmental Report. The environmental consequences of recommendations contained in submissions and the environmental consequences of Proposed Amendments were communicated to the Elected Members thereby contributing towards mitigation by avoidance.

Sensitivities considered by the SEA for the Development Plan included the following:

- Designated ecological sites;
- Land cover;
- Soils, subsoils and soil sealing;
- Water Framework Directive (WFD) Status for Surface and Ground Waters;
- WFD Register of Protected Areas;
- EPA River Water Quality Monitoring;
- GSI Aquifer Vulnerability and Productivity;
- Flood events and 1 in 100 and 1 in 1000 year flood event modelled lines;
- Waste Water Treatment Infrastructure/Capacity Needs;
- Drinking water supply;
- Drinking water quality;
- Archaeological Heritage;

- Architectural Heritage; and,
- Scenic Roads and Views, Sensitive Landscape Areas and Views and Prospects.

A number of these sensitivities are mapped on Figure 2.1, Figure 2.2 and Figure 2.3.

## **2.3 Appropriate Assessment and Strategic Flood Risk Assessment**

An Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) have both been undertaken on the Plan.

The requirement for AA is provided under the EU Habitats Directive (Directive 1992/43/EEC). The requirement for SFRA is provided under 'The Planning System and Flood Risk Management Guidelines for Planning Authorities' (DEHLG, 2009).

The preparation of the Plan, SEA, AA & SFRA have taken place concurrently and the findings of the AA & SFRA have informed both the Plan and the SEA, although as noted in Section 4.4, on foot of a decision by Council on 28<sup>th</sup> February 2012, one of the SFRA recommendations has not been integrated into the Plan.

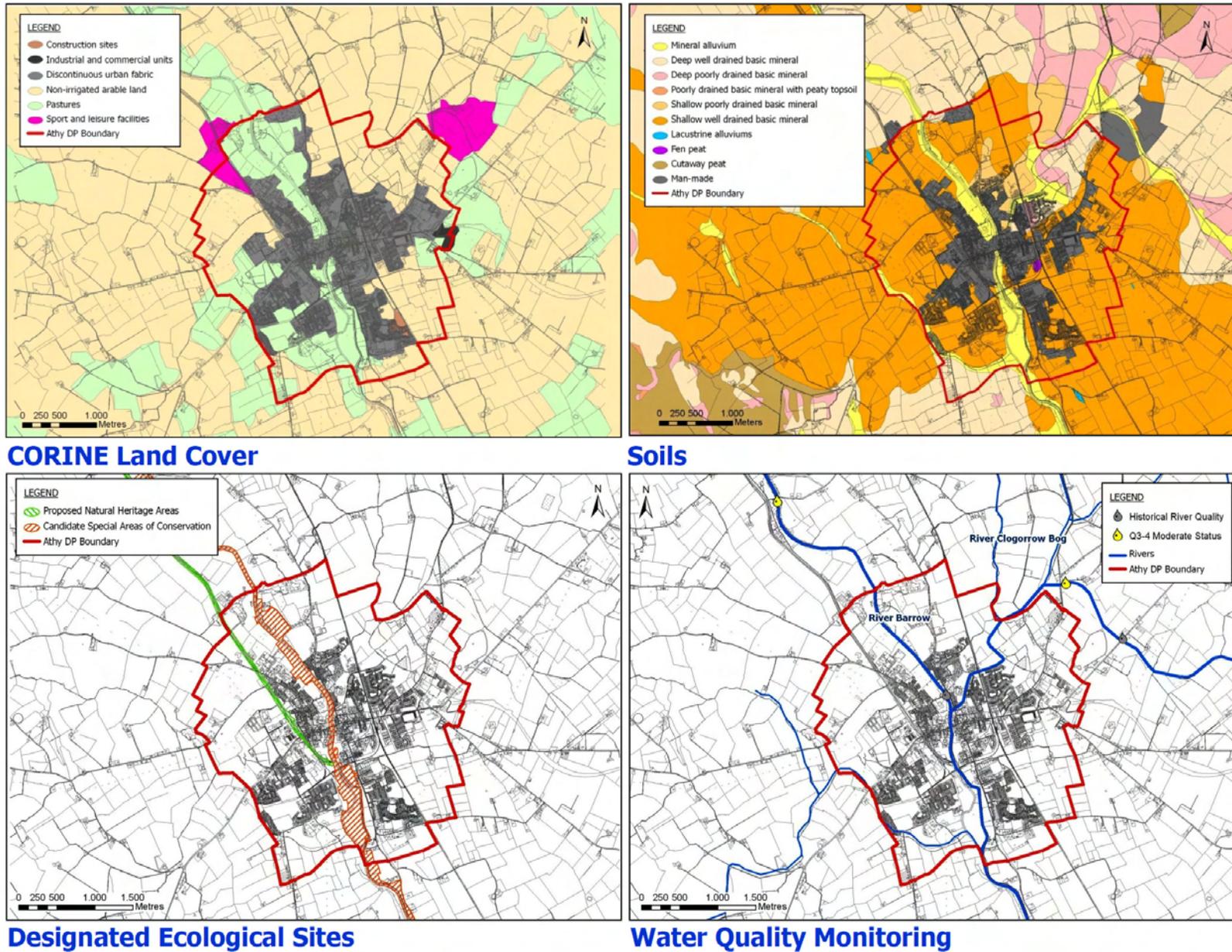
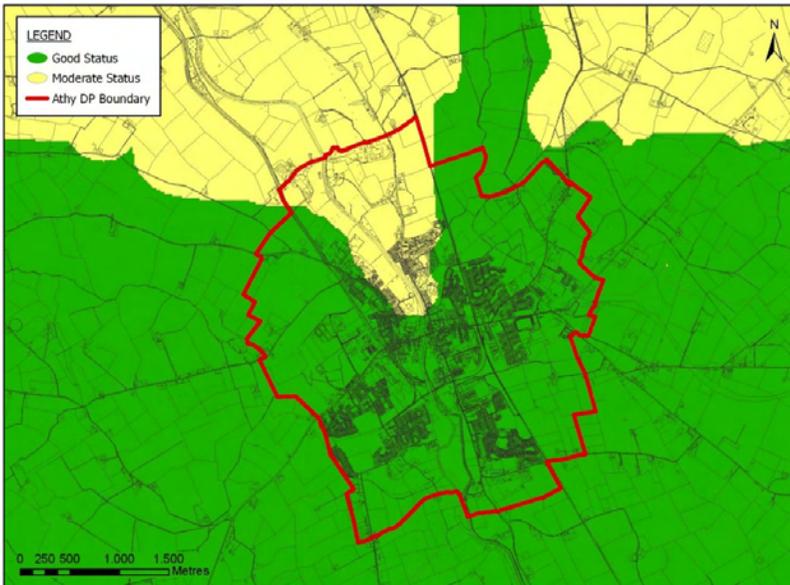
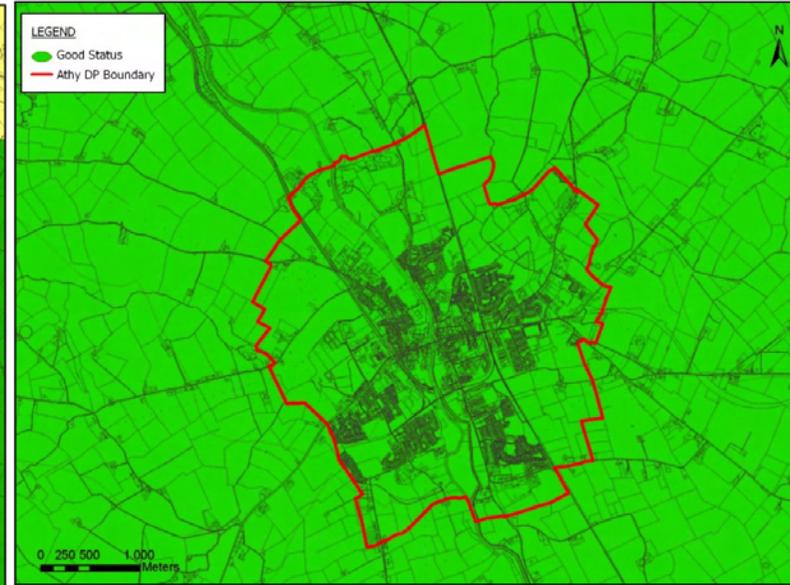


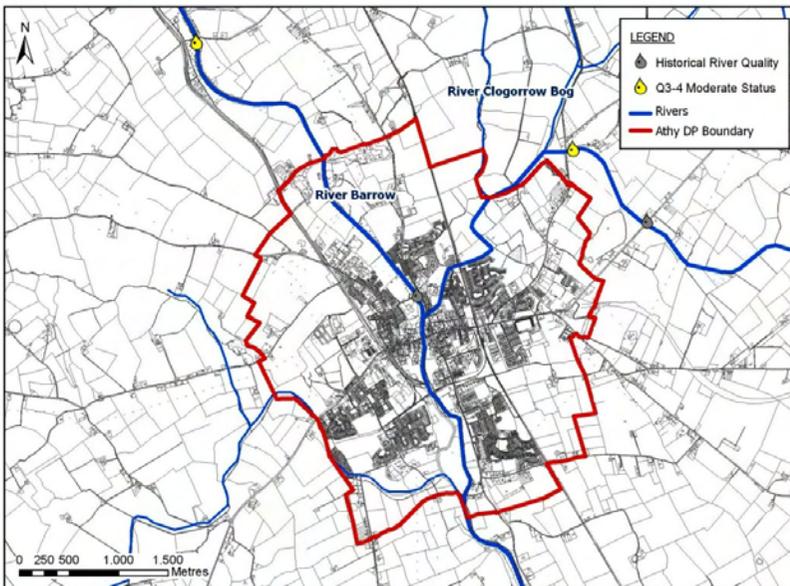
Figure 2.1 Environmental Sensitivities (Set 1 of 3)



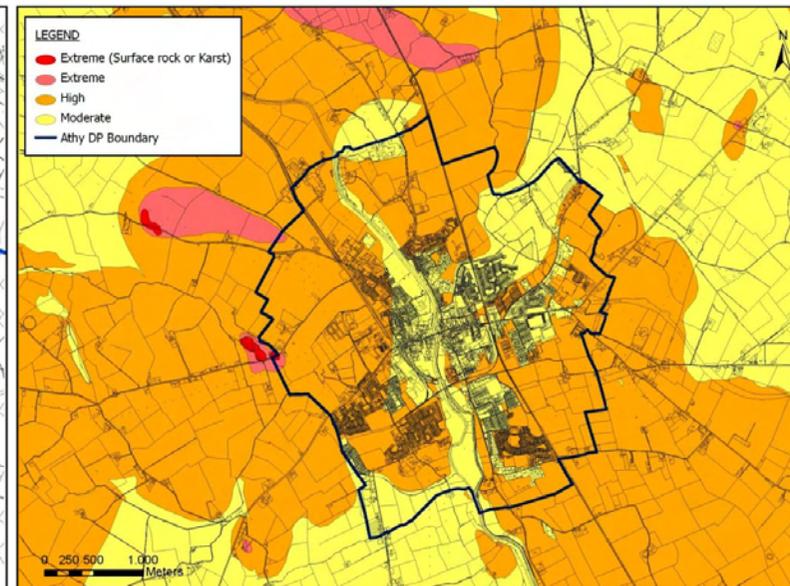
**Surface Water Status**



**Groundwater Status**

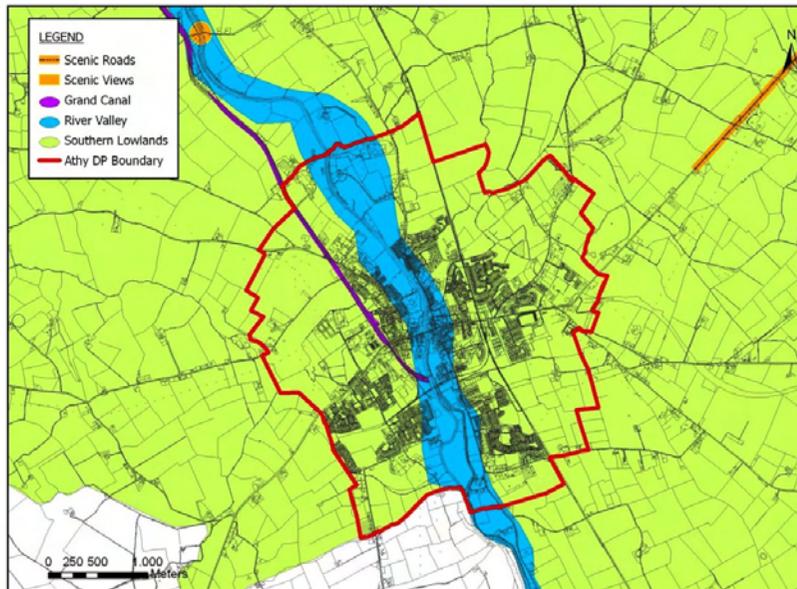


**Water Quality Monitoring**

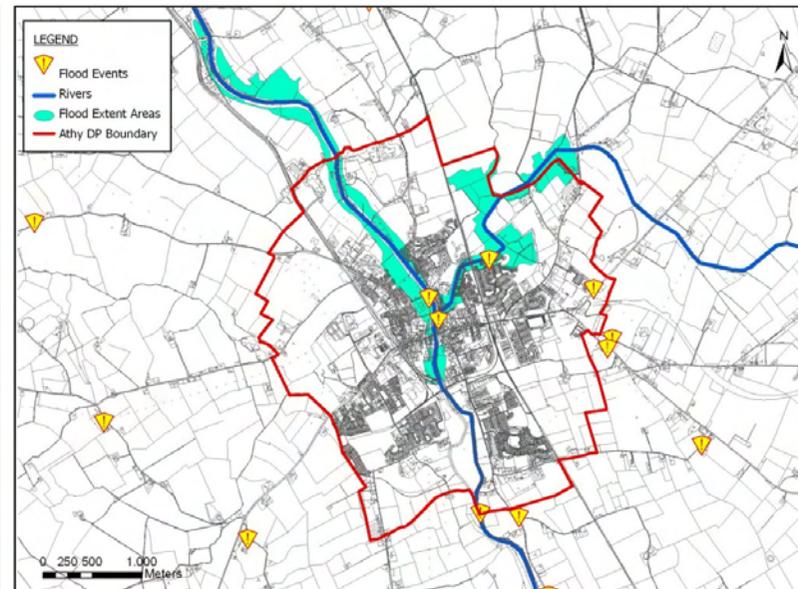


**Aquifer Vulnerability**

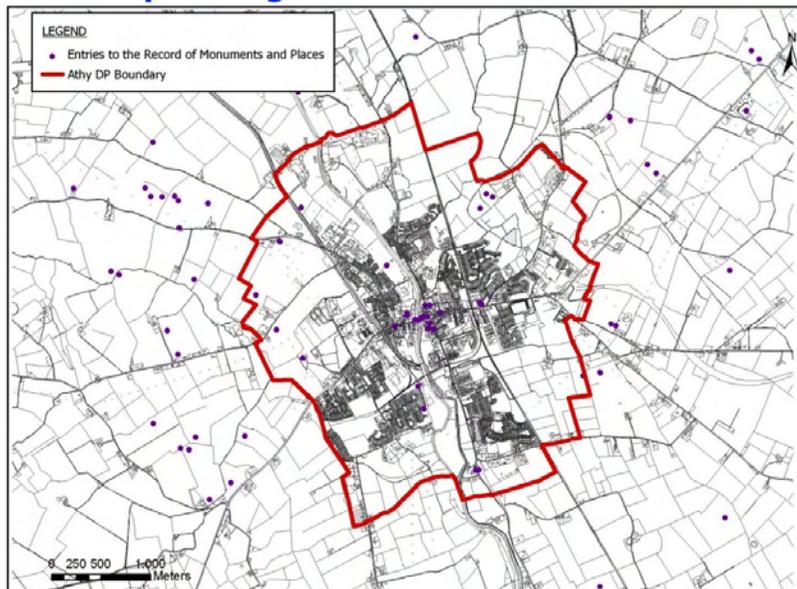
**Figure 2.2 Environmental Sensitivities (Set 2 of 3)**



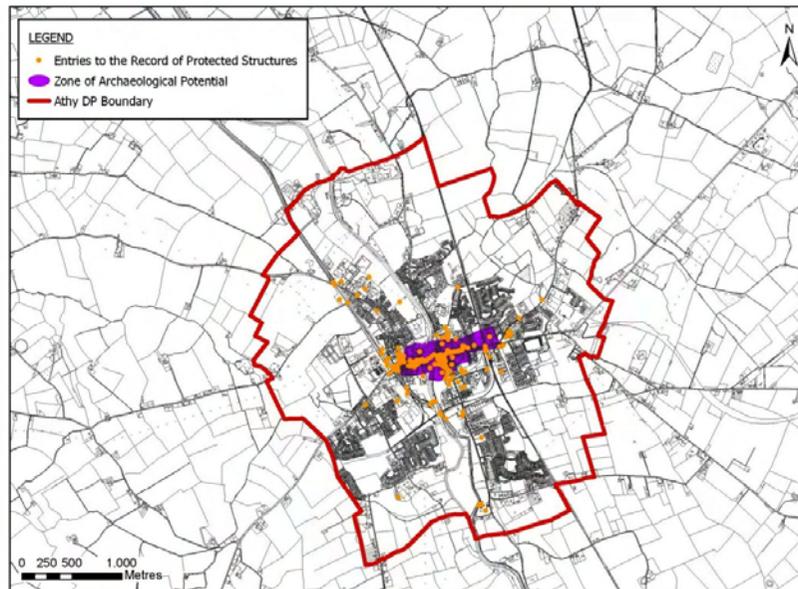
**Landscape Designations**



**Rivers and Flood Events**



**Cultural Heritage I**



**Cultural Heritage II**

**Figure 2.3 Environmental Sensitivities (Set 3 of 3)**

## 2.4 Mitigation

### 2.4.1 Introduction

Mitigation measures are measures envisaged to prevent, reduce and, as fully as possible, offset any significant adverse impacts on the environment of implementing the Development Plan.

Likely significant beneficial effects of implementing the Plan have been and will be maximised and potential adverse effects have been and will be avoided, reduced or offset through:

- The consideration of alternatives for the Plan;
- Mitigation by Addition of Policies and Objectives; and,
- Mitigation measures arising from the findings of the Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA) (note that on foot of a decision by Council on 28<sup>th</sup> February 2012, one of the SFRA recommendations has not been integrated into the Plan - see Section 4.4).

### 2.4.2 Mitigation through Consideration of Alternatives

A range of potential alternative development scenarios for the Development Plan were identified at an early stage in the process and evaluated for their likely significant environmental effects.

The environmental baseline and Strategic 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 Planning team make an informed choice as to which alternative was to be put before the Members of the Council.

Communication of this evaluation to the Members of the Council through this report will help the Members to make an informed choice with regard to the making of the Plan.

### 2.4.3 Mitigation by Addition of Policies and Objectives

Appendix II to the SEA Scoping Report included 35 suggestions for policies and objectives to be integrated into the Plan. All of these suggestions were integrated into the Draft Plan through individual or multiple plan provisions and some have been included verbatim. The individual/multiple plan provisions are identified in this section and are envisaged to mitigate significant adverse effects on the environment of implementing the Plan.

Note that mitigation measures generally benefit multiple environmental components i.e. a measure providing for the protection of surface water resources could beneficially impact upon the protection of biodiversity, flora and fauna, drinking water resources, human health and provision of appropriate waste water treatment infrastructure.

The reference codes are those which accompany the relevant measures in Section 8 of the Environmental Report and in the Plan.

#### 2.4.3.1 Natura 2000 Sites and Annexed Habitats and Species

Policies: CS 14, GT 15, NH 1, NH 2, NH 6, NH 7 and NH9.

Objective NHO 7.

#### 2.4.3.2 Ecological Connectivity and Stepping Stones

Policies: CS 13, NH 12 and NH 21.

Objective NHO 8.

#### 2.4.3.3 Human Health

Policies: MA1, N 1, N 2 and WM 5.

Objective ENO 4.

See also measures which have been included under Water Services (Waste Water) and Water Services (Drinking Water).

#### 2.4.3.4 Reuse of Brownfield Lands

Policies: CS 8, ED6, HP6, UR 1 and UR 2.

#### **2.4.3.5 Status of Surface and Ground Water Bodies**

Policies: WQ 1, WQ2, WQ 4 and WQ6.

Objective: WDO4.

Also see measures under Water Services (Waste Water).

#### **2.4.3.6 Flooding**

Policies: HP28, SW1, SW3 and LU4.

Objectives: WDO13 and WDO14.

#### **2.4.3.7 Water Services (Waste Water)**

Policies WW3, WW4, WW5 and WS1.

Objectives: WDO2 , WDO3 and WDO8,.

#### **2.4.3.8 Water Services (Drinking Water)**

Policies: WS1, WS2, WS3, WS4, WS6, WS10 WS12 and WQ7.

Objective: WDO5.

#### **2.4.3.9 Travel Related Greenhouse Gas Emissions and Car Dependency**

Policies: TM 3, WC 1, WC 4 and WC 7.

#### **2.4.3.10 Archaeological Heritage**

Policies: CS 12, AH1, AH 3, AH 4 and AH 6.

#### **2.4.3.11 Architectural Heritage**

Policies: CS 12, PS 1, PS 7 and ACA1.

Objective AHO1.

#### **2.4.3.12 Visual/Landscape**

Policies: TE 5, VP 1 and VP 2.

#### **2.4.3.13 Other Mitigation Measures**

Mitigation measures - including those detailed above - have been integrated into the Plan arising from the findings of the Appropriate Assessment (AA) and Strategic Flood Risk Assessment (SFRA).

In particular, the AA has resulted in the amendment of the following Policies:

- Policy A7

From:

To facilitate, where practicable, the provision of cycle-ways or walkways along the extent of the canal, in co-operation with landowners, Waterways Ireland and DoEHLG.

To:

To facilitate, where practicable, the provision of cycle-ways or walkways along the extent of the canal, in co-operation with landowners, Waterways Ireland and government departments. Any proposed cycling or walking routes along the Grand Canal and River Barrow will be subject to a feasibility study and Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive.

- Policy R 9

From:

To encourage the development of a marina within the town area of approximately 50 berths and appropriate adjoining uses". This proposed development of a marina would need to be the subject of an AA and SEA and a separate study to determine the optimum and most appropriate location of the development.

To:

A study will be carried out to explore the feasibility of developing a marina within the town area. This study will examine the need for the marina in light of a "do nothing" context, a range of sizes, locations and adjoining uses. Any development proposed in light of this study will be subject to EIA and Appropriate Assessment in accordance with Article 6(3) of the Habitats Directive.

## Section 3 Environmental Report and Submissions & Observations

### 3.1 Introduction

This section details how both the Environmental Report and submissions and observations made to the planning authority on the Environmental Report and SEA process have been taken into account during the preparation of the Plan.

### 3.2 SEA Scoping Submissions

As noted under Section 2.1:

- Written submissions on the scope of the SEA were received from each of the environmental authorities and the information contained in these submissions - including that which related to Appropriate Assessment (AA) - was taken into account during the formulation of the scope of the SEA; and
- Representatives from the EPA, Athy Town Council, Kildare County Council and CAAS attended an SEA Scoping Meeting on the 3<sup>rd</sup> of November 2010. The information provided at the SEA Scoping meeting was used to update the Scoping Report and was taken into account during the formulation of the scope of the SEA.

The Environmental Protection Agency's (EPA's) scoping submission covered a number of topics including:

- Up-to-date Environmental Monitoring Data;
- Geographical Information Systems;
- Appropriate Assessment;
- Scoping Meetings/Workshops;
- Alternatives;
- Consultation;
- Assessment of Likely Significant Effects
- Mitigation of Significant Effects;
- Monitoring Proposals;
- Process and SEA-Environmental Report Compliance;
- Integration of SEA and Plan/Programme
- Documentation of the SEA Process;

- Possible Proposed Amendments to the Draft Plan;
- Information on the Decision/ SEA Statement;
- SEA Guidance /Methodology;
- Environmental Authorities;
- Water;
- Water Framework Directive;
- Drinking Water/Water Supply;
- Waste Water Treatment;
- Groundwater Protection;
- Bathing Water;
- Water Conservation;
- Water Services Act 2007 - Strategic Water Services Plans;
- Flood Prevention and Management;
- Integration of infrastructure, zoning and development;
- Biodiversity;
- EU Protected Habitats and Species in Ireland;
- National Biodiversity Data Centre (NBDC);
- Annex I/ Annex II /Annex IV Habitats Directive;
- Management Plans for Designated Areas;
- Fisheries;
- Mineral Abstraction and Natura 2000 Sites;
- Wind Energy Developments and Natura 2000 Sites;
- Buffer Zones;
- Appropriate Assessment;
- Non-Designated Habitats and Species;
- Habitat Mapping;
- Alien species and Noxious Weeds;
- Inland waters – rivers, streams, wetlands
- Air, Noise and Climatic Factors;
- Radon;
- Energy Conservation/Renewable Energy;
- Landscape Character Assessment;
- Human Health/Quality of Life;
- Transportation;
- Tourism;
- Infrastructure Planning;
- Urban Waste Water Discharge Licensing;
- Waste Management;
- Environmental Impact Assessment;
- Strategic Environmental Assessment;

- Obligations with respect to National Plans and Policies and EU Environmental Legislation; and
- EPA Report: "Ireland's Environment 2008: Main Environmental Challenges".

The submission was accompanied by an *SEA Pack* which comprised a combination of Guidance, Checklists and other information. Key topics covered included:

- Drinking Water;
- Urban Waste Water Discharges;
- Wetlands Conservation and Protection; and
- Appropriate Assessment of Land Use Plans.

The Department of the Environment, Heritage and Local Government's (DEHLG's) submission covered a number of topics including:

- Nature Conservation;
- Protected Species;
- Strategic Environmental Objectives;
- Management Plans of Natura 2000 Sites; and
- Archaeological Heritage.

The Department of Communications, Energy and Natural Resources' (DCENR's) submission stated that they had no observations or comments to make.

### 3.3 Other Submissions and Observations

The EPA, DEHLG and Dublin and Mid-East Regional Authorities made submissions on the Plan and Environmental Report while they were on public display. The information contained in these submissions was taken into account by the SEA as well as the Appropriate Assessment which was undertaken for the Plan.

The submissions resulted in the following updates being made to the SEA Environmental Report:

A) To add the following text to Section 9 of the SEA Environmental Report:

Appendix II to the SEA Scoping Report included 35 suggestions for policies and objectives to be integrated into the Plan. All of these suggestions were integrated

into the Draft Plan through individual or multiple plan provisions and some have been included verbatim. The individual/multiple plan provisions are identified in this section.

B) To add the following source for biodiversity to Table 10.1 in the SEA Environmental Report:

River Basin Management Data.

C) To add the following information concerning residual impacts in Section 7.5 of the SEA Environmental Report:

| <b>Residual Negative Effects</b>   | <b>Cumulative</b>  | <b>Short, Medium or Long term</b>                    | <b>Temporary or Permanent</b>                              |
|--|--|--|--|
| Car dependency, travel related greenhouse gas emissions, brownfield development  | Yes as a result of factors including amounts of development over an extent of zoned lands, some of which are located in peripheral areas | All  | Permanent  |
| Ecological connectivity and non-designated habitats  | As above   | All  | Permanent  |
| Provision of appropriate water Services and interaction with water resources, drinking water and human health (in the absence of significant extra investment) | As above   | All (in the absence of significant extra investment) | Permanent (in the absence of significant extra investment) |
| Conflict with minimisation of flood risk   | As above   | All  | Permanent  |

D) To add the following sentence to Section 10.4 of the SEA Environmental Report:

Indicators and targets will be reviewed during the preparation of the preliminary monitoring evaluation report.

E) To update paragraph 4 in Section 2.7 of the SEA Environmental Report as follows:

The Environmental Report is required to contain the information specified in Schedule 2 of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004 (SI No. 4356 of 2004) (see Table 2.1).

F) To reword SEO B2 in the SEA Environmental Report as follows:

SEO B2: To ensure compliance with Article 10 of the Habitats Directive with regard to the protection of corridors, stepping stones and contiguous areas of habitat<sup>3</sup> which are important at Town and environs level for wild fauna and flora and essential for the migration, dispersal and genetic exchange of wild species **and to protect protected species.**

Addendum III to the Environmental Report (which details the environmental consequences of the Manager's recommendations) accompanied the Manager's Report circulated to Elected Members.

On the adoption of the Plan, the Addenda were used to update the original Environmental Report into a final Environmental Report which is available alongside the Development Plan.

At each stage of the process the Elected Members took into account the findings of the Environmental Report and/or the Addenda as appropriate.

Note that each of the Addenda considered issues which were relevant to the Appropriate Assessment that was undertaken on the Plan.

### 3.4 Environmental Report

The Environmental Report and the Draft Plan were placed on public display in March 2011.

Addendum I to the Environmental Report (which details responses to submissions on the Environmental Report which were made during the period of public display of the Draft Plan and the Environmental Report) accompanied the Manager's Report circulated to Elected Members. Addendum I proposed updates to the Environmental Report as a result of submissions, as appropriate.

Proposed Amendments to the Draft Plan and Addendum II to the Environmental Report (which identified the environmental consequences of relevant Proposed Amendments) were placed on public display in November 2011.

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<sup>3</sup> Important corridors, stepping stones and contiguous areas of habitat include the River Barrow and the Grand Canal. It is recommended that important corridors, stepping stones and contiguous areas of habitat are identified as part of the monitoring programme and that time resources are spent in the monitoring of these rather than in the monitoring of corridors or areas of habitat which are not important at Town and environs level.

## Section 4 Alternatives

### 4.1 Introduction

This section summarises the alternative scenarios for the Development Plan, the evaluation of these scenarios and the reasons for choosing the Plan, as adopted, in the light of the other reasonable alternatives dealt with.

### 4.2 Description of the Alternative Plan Scenarios

#### 4.2.1 Alternative Scenario 1: *Consolidation and Western Expansion*

Alternative Scenario 1 (see Figure 4.1) provides for the consolidation of the town centre and the development of additional lands to the west of the town centre and Grand Canal. It:

- Concentrates mixed high density development on available sites in the town centre;
- Concentrates additional mixed Residential and Employment uses to the west of the town centre and Grand Canal; and,
- Provides for the potential relocation of the Tegral and Greencore companies and the redevelopment of these sites for mixed uses thereby extending the town centre and bringing higher density employment uses closer to the residential area of Ardrew to the west of the town.

#### 4.2.2 Alternative Scenario 2: *Consolidation and Eastern Expansion*

Alternative Scenario 2 (see Figure 4.2) provides for the consolidation of the town centre and the development of additional lands to the east of the town centre and the railway line. It:

- Concentrates mixed high density development on available sites in the town centre; and,

- Concentrates additional mixed Residential and Employment uses to the east of the town centre and the railway line.

#### 4.2.3 Alternative Scenario 3: *Peripheral Expansion*

Alternative Scenario 3 (see Figure 4.3) provides for the peripheral expansion of the Town. It:

- Applies Residential and Employment land use zoning objectives from areas beyond the existing development envelope to lands bordering the administrative boundary of the Town Council.
- Provides for development which is led by market demand, with planning applications would be evaluated on a case by case basis.

#### 4.2.4 Alternative Scenario 4: *Consolidation and Limited Expansion around Existing Development Envelope*

Alternative Scenario 4 (see Figure 4.4) provides for the consolidation of the town centre and limited expansion of lands generally adjacent to the existing development envelope. It:

- Concentrates mixed high density development on available sites in the town centre
- Limits the zoning of lands to the quantity required to fulfil the relevant targets for Athy as set out in the Regional Planning Guidelines and the Kildare County Development Plan.
- Decisions with regard to which lands are dezoned from the current 2006-2012 Plan are made according to the presence or absence of key environmental considerations including:
  - The River Barrow candidate Special Area of Conservation (cSAC);
  - Flood Risk; and,
  - Proximity to the town centre and public transport links.

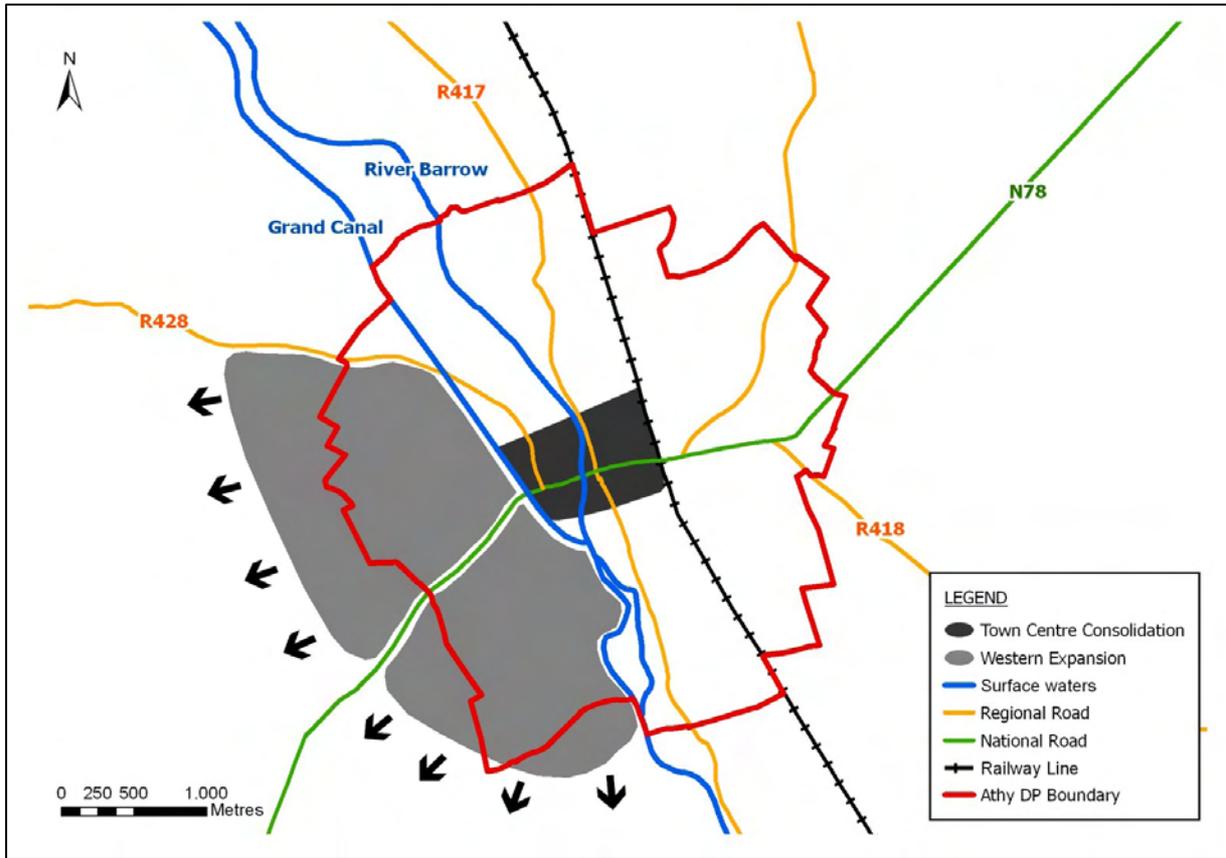


Figure 4.1 Scenario 1: Consolidation and Western Expansion

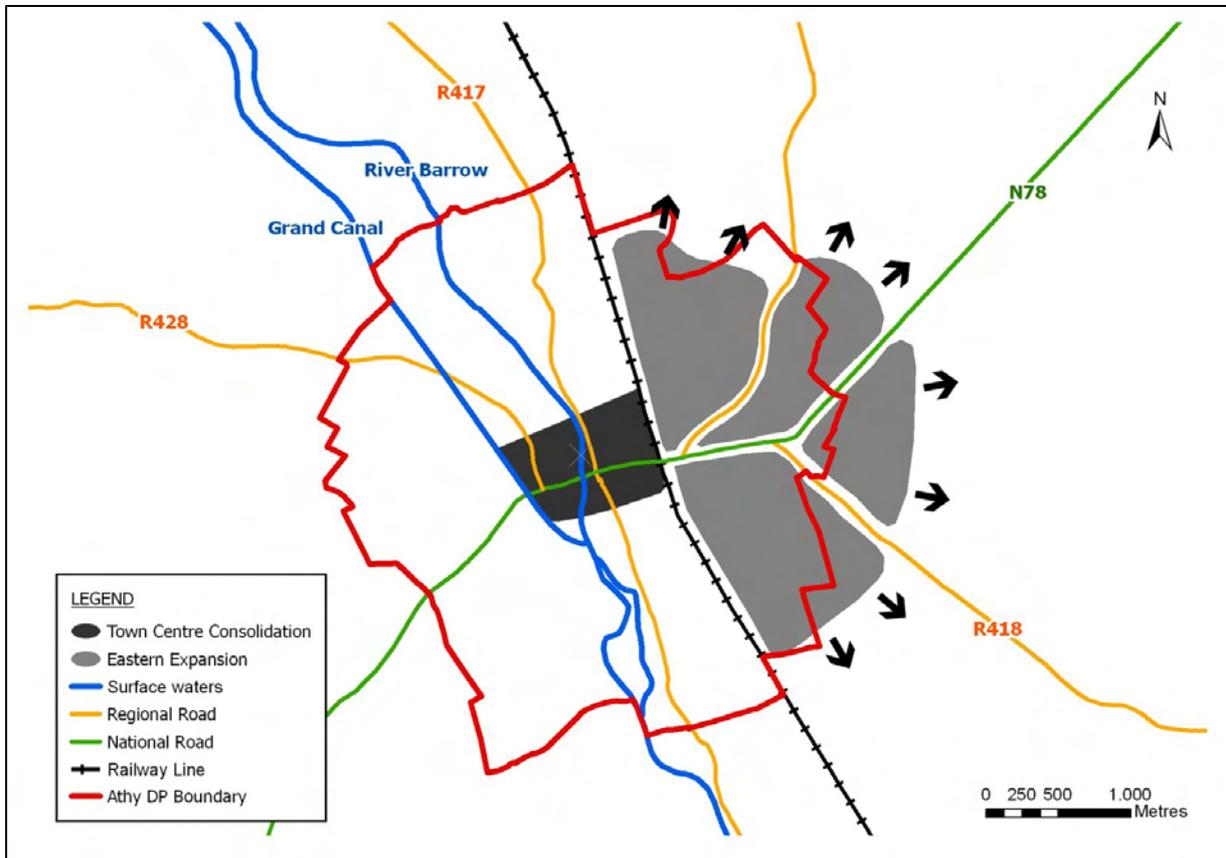


Figure 4.2 Scenario 2: Consolidation and Eastern Expansion

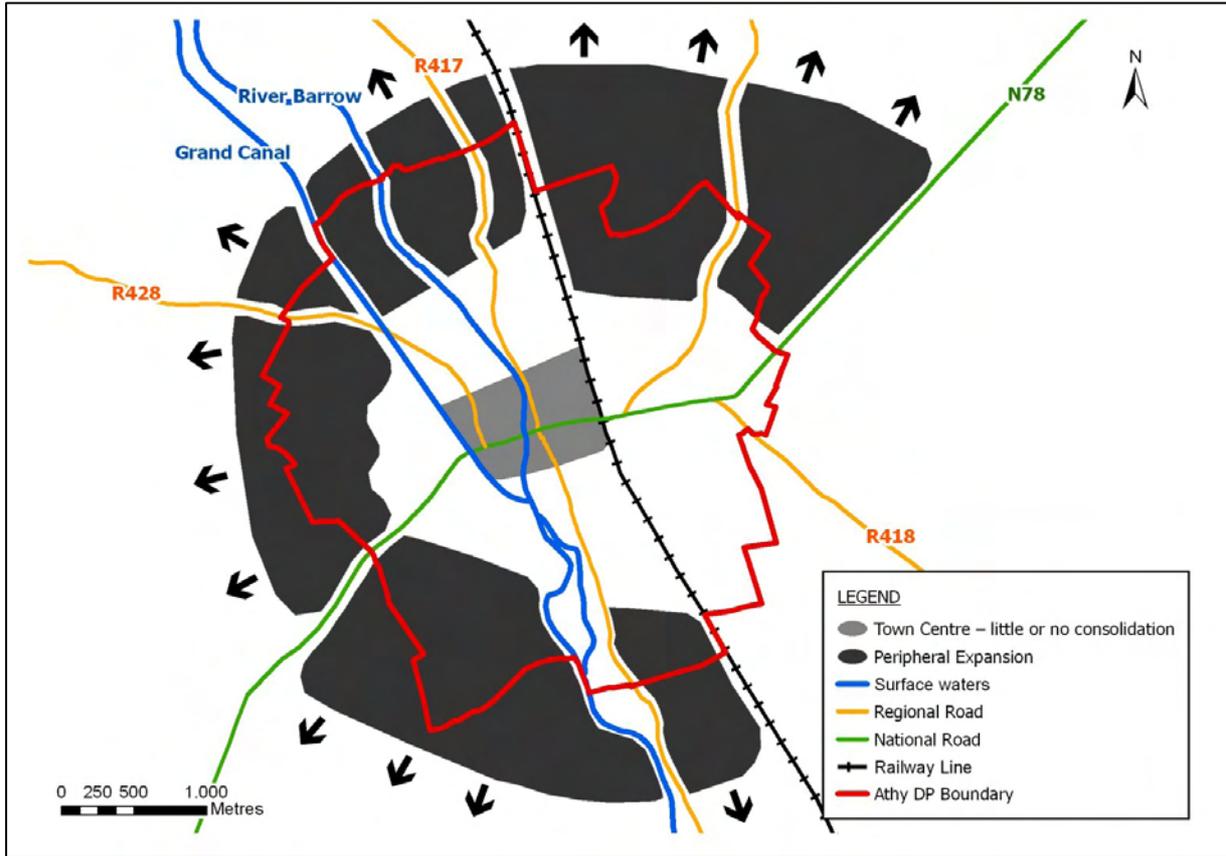


Figure 4.3 Scenario 3: *Peripheral Expansion*

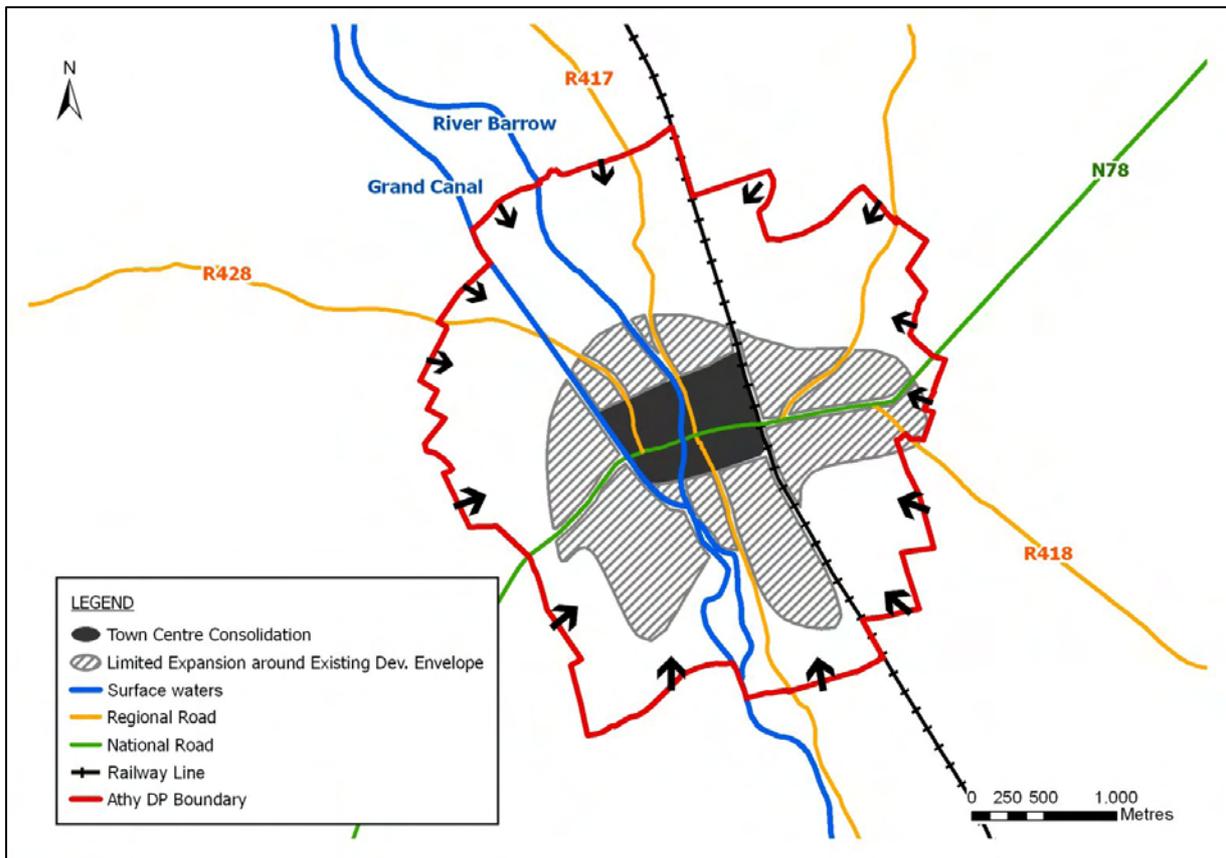


Figure 4.4 Scenario 4: *Consolidation and Limited Expansion around Existing Development Envelope*

## 4.3 Evaluation of the Alternative Scenarios

### 4.3.1 Methodology

This section summarises the evaluation of the Alternative Scenarios which is found in Section 7 of the Environmental Report. Scenarios are evaluated in a succinct and focused way for both planning and environmental impacts against both the existing environment and the Strategic Environmental Objectives (both of which are summarised within Section 3).

### 4.3.2 Alternative Scenario 1: *Consolidation and Western Expansion*

#### **Car Dependency, Travel Related Greenhouse Gas Emissions & Brownfield vs. Greenfield Development**

By providing for the consolidation of the town centre thereby encouraging brownfield development, Scenario 1 would be likely to contribute towards an uptake in more sustainable modes of transport. Contributing towards this uptake would contribute towards efforts to minimise:

- energy usage for transport;
- travel related emissions to air; and,
- increases in car dependency.

However, by providing for significant additional zoning to the west of the town centre, this scenario could dilute the consolidation of the town centre and limit associated brownfield development and increases in sustainable mobility.

#### **Water Services, Water Resources and Human Health**

Development within the town centre provided for by this Scenario would be conveniently served by drinking water services and by the existing waste water treatment plant - thereby contributing to the protection of water resources and human health. Although there is waste water treatment capacity available, an upgrade of the collection network is required. An upgrade of drinking water supply would also be needed.

It would be more difficult to serve the western expansion of the town with water services; consequently, this expansion would potentially conflict with the protection of water resources, drinking water and human health.

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

A potential conflict between this scenario and human health could arise as a result of the development of potentially contaminated sites.

#### **Flood Risk**

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

#### **Biodiversity and Flora and Fauna**

Town centre consolidation potentially conflicts with sensitivities including the River Barrow cSAC and ecologically sensitive non-designated sites. The western expansion provided for by this scenario potentially conflicts with ecological connectivity - including that of the Grand Canal pNHA.

## **Landscape**

Town centre consolidation provided for by this scenario potentially conflicts with protected views along Leinster Street and along the River Barrow while the western expansion potentially conflicts with protected views along the Grand Canal.

## **Cultural Heritage**

Potential conflicts between archaeological - including the Zone of Archaeological Potential - and architectural heritage and the consolidation of the town centre would be likely to occur. Conflicts between cultural heritage and the western expansion would also be likely to occur.

### **4.3.3 Alternative Scenario 2: *Consolidation and Eastern Expansion***

#### **Car Dependency, Travel Related Greenhouse Gas Emissions & Brownfield vs. Greenfield Development**

By providing for the consolidation of the town centre thereby encouraging brownfield development, Scenario 2 would be likely to contribute towards an uptake in more sustainable modes of transport. Contributing towards this uptake would contribute towards efforts to minimise:

- energy usage for transport;
- travel related emissions to air; and,
- increases in car dependency.

However, by providing for significant additional zoning to the east of the town centre, this scenario could dilute the consolidation of the town centre and limit associated brownfield development and increases in sustainable mobility.

#### **Water Services, Water Resources and Human Health**

Development within the town centre provided for by this Scenario would be conveniently served by drinking water services and by the existing waste water treatment plant - thereby contributing to the protection of water resources and human health. Although there is waste water treatment capacity available, an upgrade of the collection network is required. An upgrade of drinking water supply would also be needed.

It would be more difficult to serve the eastern expansion of the town with water services; consequently, this expansion would potentially conflict with the protection of water resources, drinking water and human health.

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

A potential conflict between this scenario and human health could arise as a result of the development of potentially contaminated sites.

#### **Flood Risk**

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

#### **Biodiversity and Flora and Fauna**

Town centre consolidation potentially conflicts with sensitivities including the River Barrow cSAC and ecologically sensitive non-designated sites. The eastern expansion provided for by this scenario potentially conflicts with ecological connectivity.

## **Landscape**

Town centre consolidation provided for by this scenario potentially conflicts with protected views along Leinster Street and along the River Barrow.

## **Cultural Heritage**

Potential conflicts between archaeological - including the Zone of Archaeological Potential - and architectural heritage and the consolidation of the town centre would be likely to occur. Conflicts between cultural heritage and the eastern expansion would also be likely to occur.

### **4.3.4 Alternative Scenario 3: *Peripheral Expansion***

#### **Car Dependency, Travel Related Greenhouse Gas Emissions & Brownfield vs. Greenfield Development**

By not consolidating the existing town centre, not encouraging brownfield development and providing for new development on peripheral greenfield sites, away from the town centre and public transport nodes, Scenario 3 would be likely to result in more unsustainable modes of transport and would increase:

- energy usage for transport;
- travel related emissions to air; and,
- levels of car dependency.

These environmental conflicts associated with these increases would not be likely to be mitigated.

#### **Water Services, Water Resources and Human Health**

Peripheral development would not be served by public waste water treatment or drinking water services thereby conflicting with water resources, drinking water and human health - these conflicts would be unlikely to be fully mitigated.

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

A potential conflict between this scenario and human health could arise as a result of the development of potentially contaminated sites.

#### **Flood Risk**

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

#### **Biodiversity and Flora and Fauna**

Peripheral development potentially conflicts directly and cumulatively with sensitivities including the River Barrow cSAC and the Grand Canal pNHA. Peripheral development would also cumulatively conflict with ecological connectivity - these conflicts would be unlikely to be fully mitigated.

## **Landscape**

Peripheral development would result in significant change to the landscape surrounding the existing development envelope of the town.

## **Cultural Heritage**

Potential conflicts between archaeological in the peripheries of the Plan area and potential conflicts architectural heritage in the town centre (in the long term, arising from a lack of development and subsequent decay) would be likely to occur. By not providing for the consolidation of the town centre this scenario would be likely indirectly contribute towards the protection of the Zone of Archaeological Protection.

### **4.3.5 Alternative Scenario 4: *Consolidation and Limited Expansion around Existing Development Envelope***

#### **Car Dependency, Travel Related Greenhouse Gas Emissions & Brownfield vs. Greenfield Development**

By providing for the consolidation of the town centre thereby encouraging brownfield development and only allowing limited expansion, Scenario 4 would be likely to help to maximise the uptake in more sustainable modes of transport. Maximising this uptake would help to minimise:

- energy usage for transport;
- travel related emissions to air; and,
- increases in car dependency.

#### **Water Services, Water Resources and Human Health**

Development within the town centre and limited development generally adjacent to the existing development envelope provided for by this Scenario would be conveniently served by drinking water services and by the existing waste water treatment plant - thereby contributing to the protection of water resources and human health. Although there is waste water treatment capacity available, an upgrade of the collection network is required. An upgrade of drinking water supply would also be needed.

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

Potential conflict between this scenario and human health could arise as a result of the development of potentially contaminated sites.

#### **Flood Risk**

A potential conflict between this scenario and the minimisation of flood risk and consequently human health could occur.

#### **Biodiversity and Flora and Fauna**

Town centre consolidation potentially conflicts with sensitivities including the River Barrow cSAC and ecologically sensitive non-designated sites. The limited expansion provided for by this scenario potentially conflicts with ecological connectivity - including that of the Grand Canal pNHA.

#### **Landscape**

Town centre consolidation and limited expansion provided for by this scenario potentially conflicts with protected views along Leinster Street, the River Barrow and the Grand Canal.

#### **Cultural Heritage**

Potential conflicts between archaeological - including the Zone of Archaeological Potential - and architectural heritage and the consolidation of the town centre would be likely to occur.

### **4.3.6 Evaluation of Alternative Scenarios against SEOs**

The main Environmental Report provides an evaluation of each of the alternative development scenarios for the Plan against the Strategic Environmental Objectives (SEOs).

Scenario 3 *Peripheral Expansion* would be likely to conflict the most with SEOs, having 9 probable conflicts which would unlikely to be mitigated. This is because consolidation of the existing town centre would be unlikely to occur under this Scenario, with development provided for at the periphery of the town and on greenfield sites.

Scenario 4 *Consolidation and Limited Expansion around Existing Development Envelope* would be likely to: improve the status of SEOs the most, more than Scenarios 1, 2 and 3; and, potentially conflict with SEOs the least, less than Scenarios 1, 2 and 3. This is because this Scenario provides for the consolidation of the town centre and only provides limited expansion of lands which are generally adjacent to the existing development envelope.

## **4.4 The Adopted Development Plan and Reasons for choosing the Plan in light of the other reasonable alternatives dealt with**

The Alternatives that were examined were produced and evaluated at an earlier - more embryonic - stage to facilitate the evaluation and selection of a plan - having regard, *inter alia* to environmental consequences.

The scenario that was adopted for the Development Plan is similar to, but not the same as, Scenario 4 (*Consolidation and Limited Expansion around Existing Development Envelope*) – Scenario 4 achieves a good balance between potential environmental impact and conformance with relevant higher level planning objectives including the County Development Plan 2011-2017. The difference is that the adopted Plan does not conform with higher level planning objectives and provides for more zoning for built development purposes than was originally envisaged by Scenario 4.

This means that potential conflicts related to Scenario 4, identified in the previous subsections, would be more numerous and more likely to occur. They would, however, be mitigated - avoided, reduced or offset - by complying with the measures which have been integrated into the Plan, including those which are identified in Section 2 of this report.

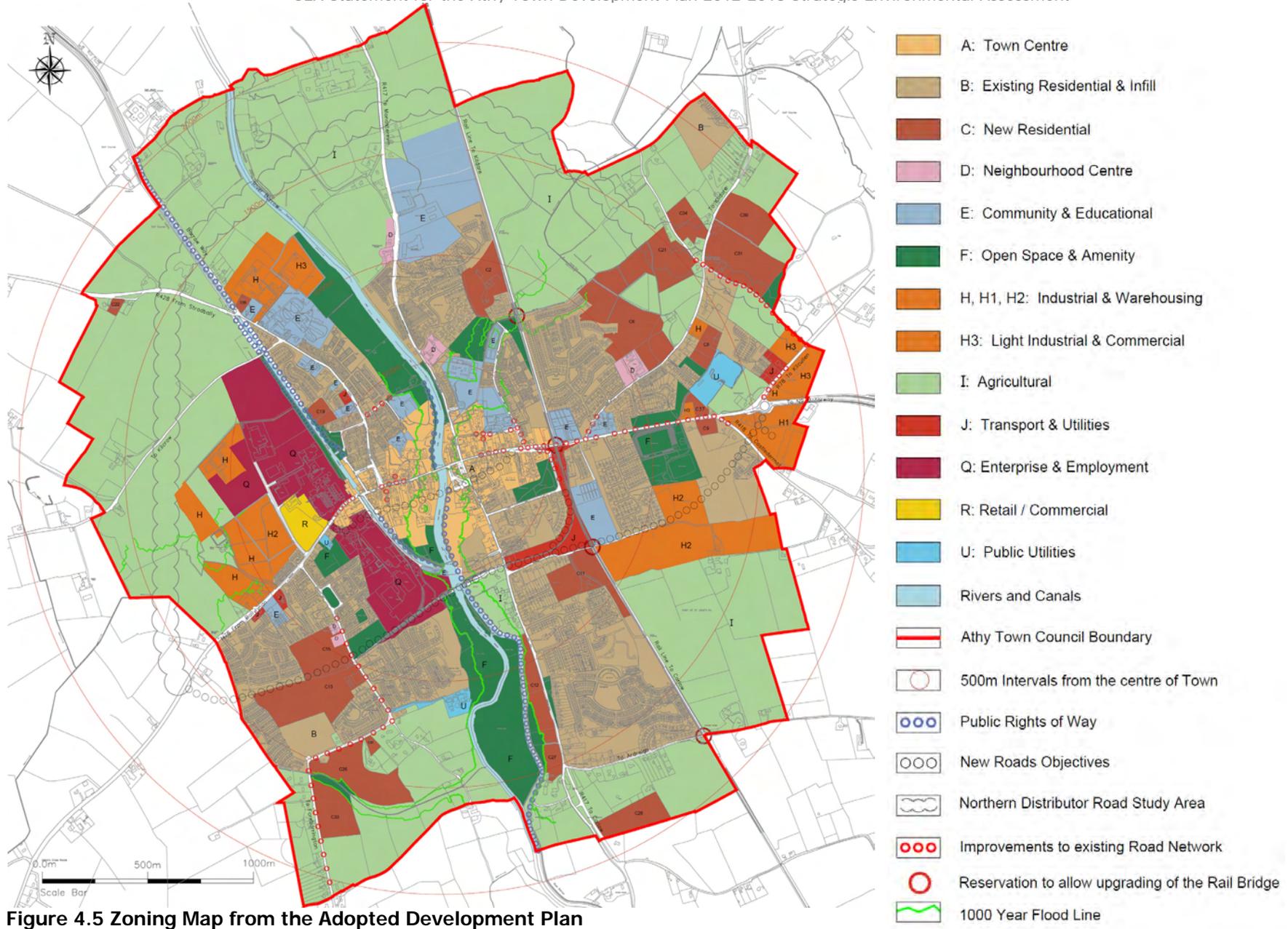
Residual effects likely to occur are detailed on Table 4.1 overleaf. In addition to the effects identified on this table it is noted that, on foot of a decision by Council on 28<sup>th</sup> February 2012, one of the Strategic Flood Risk Assessment recommendations has not been integrated into the Plan. This recommendation relates to the zoning of lands as New Residential at Woodstock South (in the western fringes of the town). Although mitigation measures integrated into the Plan were retained and would mitigate some effects, significant increases in flood risk and associated potential impacts upon human health could occur.

| <b>Residual Negative Effects</b>   | <b>Cumulative</b>  | <b>Short, Medium or Long term</b>                    | <b>Temporary or Permanent</b>                              |
|--|--|--|--|
| Car dependency, travel related greenhouse gas emissions, brownfield development  | Yes as a result of factors including amounts of development over an extent of zoned lands, some of which are located in peripheral areas | All  | Permanent  |
| Ecological connectivity and non-designated habitats  | As above   | All  | Permanent  |
| Provision of appropriate water Services and interaction with water resources, drinking water and human health (in the absence of significant extra investment) | As above   | All (in the absence of significant extra investment) | Permanent (in the absence of significant extra investment) |
| Conflict with minimisation of flood risk   | As above   | All  | Permanent  |

**Table 4.1 Residual Negative Effects**

The Development Plan (land use zoning map shown on Figure 4.5) was adopted by the Elected Members having regard to both:

1. The environmental effects which were identified by the Strategic Environmental Assessment; and,
2. Planning - including social and economic - effects.



## Section 5 Monitoring Measures

### 5.1 Introduction

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored. The Environmental Report puts forward proposals for monitoring the likely significant effects of implementing the Development Plan which are reproduced in this section.

Monitoring enables, at an early stage, the identification of unforeseen adverse effects and the undertaking of appropriate remedial action. In addition to this, monitoring can also play an important role in assessing whether the Plan is achieving environmental objectives and targets - measures which the Plan can help work towards - whether these need to be reexamined and whether the proposed mitigation measures are being implemented.

### 5.2 Indicators and Targets

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 Strategic Environmental Objectives used in the evaluation. Focus is given to indicators which are relevant to the likely significant environmental effects of implementing the Plan and existing monitoring arrangements will be used in order to monitor the selected indicators. Each indicator to be monitored is accompanied by the target(s) which were identified with regard to the relevant legislation (see Section 4 of the Environmental Report).

**Error! Reference source not found.** below shows the indicators and targets which have been selected for monitoring the likely significant environmental effects of implementing the Plan.

### 5.3 Sources

Measurements for indicators should come from existing monitoring sources and no new monitoring should be required to take place. Existing monitoring sources exist for each of the indicators and include those maintained by the Athy Town Council and other relevant

authorities e.g. the Environmental Protection Agency, the National Parks and Wildlife Service and the Central Statistics Office.

The *Development Management Process* in Athy Town Council will provide passive monitoring of various indicators and targets on an application by application basis. Where significant adverse effects - including positive, negative, cumulative and indirect - are likely to occur upon, for example, entries to the RMP, entries to the RPS or ecological networks as a result of the undertaking of individual projects or multiple individual projects such instances should be identified and recorded and should feed into the monitoring evaluation.

### 5.4 Reporting & Responsibility

A preliminary monitoring evaluation report on the effects of implementing the Development Plan will be prepared to coincide with the Manager's report to the Elected Members on the progress achieved in securing Plan objectives within two years of the making of the Plan (this Manager's report is required under Section 15 of the 2000 Planning Act). Indicators and targets will be reviewed during the preparation of the preliminary monitoring evaluation report.

Athy Town Council is responsible for collating existing relevant monitored data, the preparation of preliminary and final monitoring evaluation reports, the publication of these reports and, if necessary, the carrying out of corrective action.

It is recommended that a Steering Committee be established within the Council to oversee the monitoring process.

### 5.5 Thresholds

Thresholds at which corrective action will be considered are as follows:

- boil notices on drinking water;
- fish kills;

- court cases taken by the DEHLG regarding impacts upon archaeological heritage including entries to the Record of Monuments and Places; and,
- complaints received from statutory consultees regarding avoidable environmental impacts resulting from development which is granted permission under the Development Plan.

**Table 5.1 Selected Indicators, Targets and Monitoring Sources**

| <b>Environmental Component</b>       | <b>Selected Indicator(s)</b>   | <b>Selected Target(s)</b>  | <b>Source</b>   | <b>Monitoring Frequency</b>  |
|--------------------------------------|--|--|---|--|
| <b>Biodiversity, Flora and Fauna</b> | B1: Conservation status of habitats and species as assessed under Article 17 of the Habitats Directive   | B1: Maintenance of favourable conservation status for Annexed habitats and species to be unaffected by implementation of the Plan <sup>4</sup>                                   | a) DEHLG report of the implementation of the measures contained in the Habitats Directive - as required by Article 17 of the Directive; and,<br>b) Consultations with the NPWS.<br>c) River Basin Management Data | a) Every 6 years<br>b) At preliminary monitoring evaluation - see Section 5.4<br>c) River Basin Management Plans                           |
|                                      | B2: Percentage loss of functional connectivity to macro-corridors, stepping stones and contiguous areas of habitat which are important on a Town and environs level without remediation as a result of implementation of the Plan – as evidenced from a resurvey of CORINE mapping | B2: No significant ecological networks or parts thereof which provide functional connectivity to be lost without remediation resulting from development provided for by the Plan | a) CORINE mapping resurvey<br>b) Development Management Process in the Council<br>c) River Basin Management Data  | a) Unknown<br>b) Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4<br>c) River Basin Management Plans |
| <b>Population and Human Health</b>   | HH1: Occurrence (any) of a spatially concentrated deterioration in human health arising from environmental factors as identified by the Health Service Executive and Environmental Protection Agency   | HH1: No spatial concentrations of health problems arising from environmental factors as a result of implementing the Plan  | Consultations with EPA and Health Service Executive   | At preliminary monitoring evaluation - see Section 5.4   |

<sup>4</sup> Except as provided for in Section 6(4) of the Habitats Directive, viz. There must be:

- (a) no alternative solution available;
- (b) imperative reasons of overriding public interest for the plan to proceed; and,
- (c) adequate compensatory measures in place.

| Environmental Component | Selected Indicator(s)   | Selected Target(s)   | Source   | Monitoring Frequency   |
|-------------------------|---|--|--|--|
| <b>Soil</b>             | S1: Area of brownfield lands developed over the Development Plan's lifespan   | S1: Arising from increased levels of brownfield development, a reduced availability of brownfield land (subject to availability on the open market, the demand for such land and the ability for such lands to be sustainably re-used) at the end of the Development Plan lifespan | Development Management Process in the Council  | Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4 |
| <b>Water</b>            | W1: Classification of Overall Status (comprised of ecological and chemical status) under the European Communities Environmental Objectives (Surface Waters) Regulations 2009 (SI No. 272 of 2009) | W1: To achieve 'good status' <sup>6</sup> in all bodies of surface waters by 2015 and to not knowingly allow deterioration in the status of any surface water  | Data issued under the Water Framework Directive Monitoring Programme for Ireland (EPA, 2006) | Unknown  |
|                         | W2: Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC <sup>5</sup>   | W2: Compliance with Groundwater Quality Standards and Threshold Values under Directive 2006/118/EC   | Data issued under the Water Framework Directive Monitoring Programme for Ireland (EPA, 2006) | Unknown  |
|                         | W3i: Number of developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk   | W3i: Minimise developments granted permission on lands which pose - or are likely to pose in the future - a significant flood risk in compliance with <i>The Planning System and Flood Risk Management Guidelines for Planning Authorities</i>                                     | Development Management Process in the Council  | Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4 |

<sup>5</sup> Data may not be available for the preliminary monitoring evaluation as the groundwater threshold values to which this indicator relates have not yet been identified by the EPA.

<sup>6</sup> Good status as defined by the WFD equates to approximately the following in the current national schemes of classification as set out by the EPA:

- *Q4* in the biological classification of *rivers*;
- *Mesotrophic* in the classification of *lakes*; and,
- *Unpolluted* status in the Assessment of Trophic Status of *Estuaries and Bays* in Ireland (ATSEBI).

| Environmental Component  | Selected Indicator(s)   | Selected Target(s)  | Source   | Monitoring Frequency  |
|--------------------------|---|---|--|---|
| <b>Water (continued)</b> | W3ii: Compliance with the recommendations contained in the Strategic Flood Risk Assessment being undertaken for the Plan  | W3ii: To comply with the recommendations contained in the Strategic Flood Risk Assessment being undertaken for the Plan   | Athy Town Council  | Detail status of Plan preparation at preliminary monitoring evaluation - see Section 5.4  |
| <b>Material Assets</b>   | M1i: Number of new developments granted permission which can be adequately served with waste water treatment over the lifetime of the Plan  | M1i: All new developments granted permission to be connected to and adequately served by waste water treatment over the lifetime of the Plan  | Development Management Process in the Council  | Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4  |
|                          | M1ii: Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council   | M1ii: For the Council - alone or in combination with other Water Services Authorities - to prepare a Water Services Strategic Plan in compliance with the Water Services Act  | Athy Town Council  | Detail status of Plan preparation at preliminary monitoring evaluation - see Section 5.4  |
|                          | M2i: Number of non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health | M2i: No non-compliances with the 48 parameters identified in the European Communities (Drinking Water) Regulations (No. 2) 2007 which present a potential danger to human health as a result of implementing the Plan | a) EPA The Provision and Quality of Drinking Water in Ireland reports (EPA);<br>b) EPA Remedial Action List; and,<br>c) Athy Town Council. | a) Annual/biannual;<br>b) Annual/biannual;<br>c) Council's Water and Waste Services Department to confirm - as appropriate - status of supplies listed on Remedial Action List. |
|                          | M2ii <sup>7</sup> : Preparation of a Water Services Strategic Plan - in compliance with the Water Services Act - for the functional area of the Council                                 | M2ii: For the Council - alone or in combination with other Water Services Authorities - to prepare a Water Services Strategic Plan in compliance with the Water Services Act  | Athy Town Council  | Detail status of Plan preparation at preliminary monitoring evaluation - see Section 5.4  |

<sup>7</sup> Indicator and Target M2ii are the same as Indicator and Target M1ii

| Environmental Component         | Selected Indicator(s)   | Selected Target(s)  | Sources  | Monitoring Frequency   |
|---------------------------------|---|---|--|--|
| <b>Air and Climatic Factors</b> | C1i: Percentage of population within the Plan area travelling to work or school by public transport or non-mechanical means   | C1i: An increase in the percentage of the population within the Plan area travelling to work or school by public transport or non-mechanical means  | Central Office      Statistics Office  | Next Census 2011   |
|                                 | C1ii: Average distance travelled to work or school by the population within the Plan area   | C1ii: A decrease in the average distance travelled to work or school by the population of the Plan area   | Central Office      Statistics Office  | Next Census 2011   |
| <b>Cultural Heritage</b>        | CH1: Percentage of entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) protected | CH1: Protect entries to the Record of Monuments and Places - including Zones of Archaeological Potential - (and their context of the above within the surrounding landscape where relevant) | a) Development Management/ Enforcement Processes in the Council; and,<br>b) Consultation with DEHLG. | a) Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4<br>b) At preliminary monitoring evaluation - see Section 5.4 |
|                                 | CH2i: Percentage of entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant) protected  | CH2i: Protect entries to the Record of Protected Structures (and/or their context within the surrounding landscape where relevant)  | a) Development Management/ Enforcement Processes in the Council; and,<br>b) Consultation with DEHLG. | a) Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4<br>b) At preliminary monitoring evaluation - see Section 5.4 |
|                                 | CH2ii: Number of additions to the Record of Protected Structures and the number of additional ACAs  | CH2ii: Make Additions to the Record of Protected Structures and make additional ACAs, where appropriate   | Athy Town Council  | Detail status of Plan preparation at preliminary monitoring evaluation - see Section 5.4   |
| <b>Landscape</b>                | L1: Number of complaints received from statutory consultees regarding avoidable impacts on the landscape resulting from development which is granted permission under the Plan                              | L1: No developments permitted which result in avoidable impacts on the landscape resulting from development which is granted permission under the Plan                                      | Development Management Process in the Council  | Per granted permission; compile at preliminary monitoring evaluation - see Section 5.4   |