

Chapter 8: Environmental Management



Aim 9 Environmental Management

To protect and enhance the special environmental quality and character of the Plan area, including the conservation of natural resources and the reduction of pollution, and to ensure that the environmental impact of any new development is minimised and subject to appropriate mitigation.

- 8.1** General
- 8.2** Energy Efficiency
- 8.3** Flood Defence
- 8.4** Surface Water Disposal
- 8.5** Water Supply
- 8.6** Wastewater Treatment
- 8.7** Waste Management
- 8.8** Pollution Control

8.1 General

- 8.1.1 One of the fundamental principles of sustainable development is that the earth's resources are finite and will not be depleted by the pressures that the human race places upon them.

***Policy EM.1:
Protection of
Irreplaceable
Resources***

All development within the Plan area will be expected to minimise the depletion of irreplaceable resources, such as energy, surface and ground water, soils, habitats and historic features. A thorough assessment of proposals will be carried out to determine:

- a) The extent to which such resources are affected;
- b) The availability of appropriate alternative sites for the proposed form of development which would have a lesser effect on such resources;
- c) The scope to minimise impact through the design of development and to mitigate any proven impact; and
- d) The opportunity to compensate effectively for any apparent loss of resources.

- 8.1.2 This policy seeks to minimise the use of all forms of non-renewable resources. Any development proposal, even one which conforms to the general provisions of this Plan and is thereby acceptable in principle, could cause a degree of harm on local resources in some way. The Council will therefore wish to consider the entire 'package' of the scheme to ensure that any negative impact is minimised as far as possible.

- 8.1.3 There may also be potential to incorporate measures into a scheme that positively manage or enhance valuable features within or directly associated with the site. Where appropriate, measures will be sought to compensate for features lost or diminished as a result of a development proposal.

8.2 Energy Efficiency

- 8.2.1 Ireland is committed to reducing dependency on carbon fossil fuel consumption and is required, under the Kyoto Protocol and EU Directive, to have at least 13% of its energy generated from renewable energy sources by 2010 and, as such, the Council will support renewable energy projects that can reasonably be provided. The Council also recognises that renewable energy provides an opportunity for the matching of local energy needs to local energy sources and has the potential for both local employment creation and economic development and for increasing local competitiveness.

***Policy EM.2:
Renewable Energy***

The provision of renewable energy schemes, particularly from wind, solar and biomass resources, will be encouraged by the Council. Proposals will be considered against the following criteria, according to the scale and nature of the scheme:

- a) The proposed development would not have a detrimental effect on the environment and character of the Plan area, including visual impact and generation of emissions;
- b) The development is located and designed in a manner which would be sensitive to the character of any buildings or landscapes affected;
- c) The location of the scheme does not impinge on transport routes; and

**d) The scheme does not cause unreasonable adverse effect on existing dwellings and business premises.
Adequate supporting information, which assesses the extent of possible environmental effects and how they can be satisfactorily mitigated, will accompany any planning application for this form of development.**

- 8.2.2 Increased development of renewable energy, together with policies on energy efficiency, is essential for facilitating the delivery of the Government's commitment on both climate change and renewable energy. Where appropriate, the Council will explore the full range of renewable energy resources, their differing characteristics, locational requirements and the potential for exploiting them, subject to necessary environmental safeguards.
- 8.2.3 Renewable energy schemes can take various forms and scales. Wind energy schemes will be encouraged within the rural environs, subject to particular consideration being given to resultant visual and noise impact. It is unlikely that large-scale wind farms will be feasible or appropriate in the Plan area.
- 8.2.4 Solar energy is considered to be the cleanest form of renewable energy. However, it can have a visual impact on the landscape and on the character of buildings. Biomass also provides considerable potential, particularly within the rural environs. If biomass technology is to be applied, then regard will be given to combined heat and power schemes in order to maximise energy efficiency.
- 8.2.5 Planning applications for any such schemes must be formulated in order to reflect their characteristics and locations. Despite the benefits, proposals for developing renewable energy resources must be carefully weighed against the need to protect the environment. Supporting information will be required to demonstrate that consideration has been given to mitigating adverse impacts through careful location, design and layout.
- 8.2.6 Buildings are recognised as the biggest users of energy in Europe, representing approximately 40% of energy consumption in the EU. Directive 2002/91/EC aims to promote improvements in the energy performance of residential and tertiary (commercial and public) sector buildings. The Directive must be implemented by January 2009. It requires that a valid energy performance certificate be produced for all new dwellings from qualified and/or accredited experts. In the non-domestic sector, all new and existing buildings must have an energy certificate available when they are constructed, sold or rented out (though there are a number of buildings which are exempted on the basis of their size, use or protected status).

8.3 Flood Defence

- 8.3.1 The 2002 Development Plan identified that surface/storm water drainage was a major issue in Clonmel due to the severity and frequency of flood events in recent years. A flood study has since been carried out on behalf of the Council and the Office of Public Works (OPW) to investigate a range of flood relief options.
- 8.3.2 The report concluded that the optimum solution to the periodic flooding in Clonmel will include the following:
- Protection of properties in Marlfield;
 - Protection of properties on the Convent Road;
 - Protection of properties on Stretches Island, Green Lane and Suir Island;
 - Works to embankments and walls protecting properties in the Old Bridge area;
 - Removal of the constriction on the right bank of the South Channel;
 - Widening of the South Channel of the Suir by Denis Burke Park;
 - Work to walls protecting properties also on the Auk and Whitening Streams;
 - Replacement of the bridge between Suir and Stretches Island;
 - Extension of the quay wall from Riverview Court to Anglesea Street;
 - Opening of the dry arch of Gashouse Bridge to flows in time of flood;
 - Construction of walls and embankments to the north of the tow path between Gashouse Bridge and Mulcahy Park; and
 - Protection of properties on the banks of the Suir in Croan, Kilganey and Poulboy.
- 8.3.3 It is intended that these and other measures will be implemented during the lifetime of this Plan according to the following broad phases:

Phase 1:

Clearance of debris from a number of tributaries that feed into the River Suir throughout the effected area; culverts cleared out on the rivers Auk, east and west and Whitening Stream and the clearing of vegetation from Dudley's weir; a flood warning system to be set up to alert property owners and tenants of the potential onset of a flood in the area.

Phase 2:

Flood protection walls and embankments constructed to protect individual properties in Marlfield, Greenane and along the Convent Road; flood walls around Stretches Island; flood walls and embankments around Green Lane and the Old Bridge area; the Whitening Stream culvert replaced; the quay wall from Riverview Court to Joyce's Lane extended to a height of 1.95m above the quay wall.

Between Joyce's Lane and the Old Bridge the quay to be extended to a height of 1.2m above the footpath level, receiving arrangements for a demountable flood protection system to the top of the wall. Surface water and land drainage requirements for the affected areas also to be carried out.

Phase 3:

The quay wall from the Old Bridge to the Showgrounds to be extended to a height of 1.2m above the footpath level, with receiving arrangements for a demountable flood protection system to the top of the wall provided; embankments and walls between the Showgrounds and the stream upstream of the Waste Water Treatment Plant to be constructed; two bridges south of Stretches Island to be replaced; south channel of the River Suir to be widened at two locations; surface water and land drainage requirements for the affected areas also to be carried out.

Phase 4:

Flood walls and embankments to be constructed to protect vulnerable properties between the Tannery and Sir Thomas' Bridge; flood walls to be constructed to protect properties

along the rivers Auk east and west; surface water and land drainage requirements for the affected areas also to be carried out.

**Policy EM.3: Flood
Defence**

Development in an area at risk from flooding will only be permitted where all of the following criteria are met, as fully demonstrated by a flood risk assessment submitted in advance of an application:

- a) The type of development is appropriate to the level of flood risk associated with its location;**
- b) The development is consistent with the flood defence works outlined above to the satisfaction of the OPW;**
- c) It would not necessitate the construction of additional flood defences to achieve adequate protection from flooding, or existing/planned flood defences protect the site to an appropriate standard and provision is made for their maintenance for the lifetime of the development;**
- d) It is clear that no reasonable option would be available in a location of lower risk;**
- e) It would not reduce the capacity of the floodplain to store water;**
- f) It would not impede the flow of water in the floodplain;**
- g) It would not result in development which would be subject to regular flooding; and**
- h) It would not have any adverse impact on the environmental, natural, geological or archaeological assets of the floodplain.**

- 8.3.4 The Council recognises the need for a precautionary approach to development in flood risk areas in accordance with the principles of sustainable development and the likely impacts of climate change. The Council will strive to minimise flood risk by aiming to ensure that no new developments are susceptible to, cause or exacerbate flooding.
- 8.3.5 The OPW will be consulted on any development proposal which affects the floodplain or could exacerbate flooding in any way. It is anticipated that development within the 1:100 year floodplain, as identified by the OPW, will be severely constrained unless its impact can be compensated for in an effective manner.
- 8.3.6 It is the responsibility of the developer to investigate and evaluate the extent of risk from flooding. Where the proposed scheme falls within or immediately adjacent to an area at risk from flooding or may increase the risk of flooding in any way, the developer will be required to submit a detailed Flood Risk Assessment.
- 8.3.7 The Council also requires all potential development within the floodplain to take due account of the defence works planned for Clonmel and any development which impinges on the flood relief scheme will be prohibited. All planning applications in the area will be referred to the OPW and all such applications will be expected to comply with the requirements of the OPW.

8.4 Surface Water Disposal

- 8.4.1 In appraising planning applications the Council will seek the protection of groundwater and surface water and where applications may impact on groundwater or surface water will balance development with the need to protect the environment. Development that results in discharge to groundwater or surface water will be required to secure a discharge licence under current relevant legislation.
- 8.4.2 The Council consider it important to consider the potential for increasing flood risk downstream due to runoff from built development throughout the river catchment and not just in the floodplain itself.

**Policy EM.4:
Surface Water**

The Council will promote suitable storm water retention facilities for new developments and existing catchment areas in the design and layout of development to enable the collection and where possible recycling of surface water according to sustainable drainage techniques.

- 8.4.3 There are a number of ways to provide more sustainable drainage by collection of surface water on site. Artificial lakes and ponds can be created, suitable open space can be flooded during storm conditions, and underground storage tanks can be installed. The value of sustainable urban drainage systems (SUDS) is recognised as a means of controlling run-off from new development and all proposals will be expected to incorporate such systems for the disposal of surface water. Where this is not possible it will be necessary to demonstrate that an acceptable alternative means of surface water disposal can be provided.
- 8.4.4 Flooding problems may be identified in locations outside the floodplain, such as may be associated with minor watercourses, inadequate culverts, blocked ditches, etc. In such areas it will also be necessary to take into account the risk of flooding in the location and design of development.
- 8.4.5 The re-use and recycling of surface water and domestic waste-water within development will also be encouraged by the Council.
- 8.4.6 A licence is required for the discharge of any trade or domestic effluent to surface or ground water other than for domestic sewage discharge not exceeding 5 cubic metres in any period of 24 hours, which is discharged to an aquifer from a septic tank or other disposal unit by means of percolation area, soakage pit or other method.

8.5 Water Supply

- 8.5.1 Clonmel presently has two water treatment plants (Glenary and Poulavanogue), which have a combined capacity in dry weather of approximately 10,000m³/day (7,000 m³/day at Glenary and 3,000m³/day at Poulavanogue). The 2002 Clonmel Development Plan identified that the demand in 2002 was 8,700m³ per day, rising to 10,000m³ per day at peak times and that the demand was forecasted to rise to 12,200m³ per day by 2012.
- 8.5.2 The treatment plants are located to the south of the town on the River Suir, with a 250mm diameter trunk main feeding the northern area. In recent years the majority of development has been to the north of the town and now these areas experience insufficient water pressure on a regular basis. As a short-term measure to augment the water supply, a borehole scheme has been provided at Monroe, which is currently operating at a capacity of 500m³/day and envisaged to provide 1000m³/day by 2009.

Policy EM.5: Water Supply The Council will facilitate the provision of an adequate, sustainable and economic public water supply to provide for the existing and future populations of the town and its environs.

Policy EM.6: Up-grading of Water Supply It is the intention of the Council to continue with the implementation of a programme for up-grading water supply mains so as to provide adequate standards of water quality, pressure, storage and fire safety.

- 8.5.3 A preliminary report prepared by consultants for the Council identified the requirement for a third water treatment plant to be constructed to the west of the town, with water extraction from the River Suir upstream of Clonmel. Construction of this plant is expected to commence within the period of this Plan.
- 8.5.4 The Council will also continue the existing Water Conservation Project to help address the imbalance that exists between the demand and supply of drinking water as a short-term measure and to implement a long-term leakage control strategy.

8.6 Wastewater Treatment



Clonmel Wastewater
Treatment Works

- 8.6.1 The Council has made considerable investments in wastewater treatment facilities in recent years. Clonmel is served by an extensive sewerage system, consisting of foul, storm and combined sewers and a Waste Water Treatment Plant (WWTP) located on Davis Road (N24). The WWTP was commissioned in 1998 and consists of traditional inlet works including screening and grit removal. The treatment process consists of primary treatment followed by filtration, intermediate settlement tanks, extended aeration and final settlement tanks. Sludge thickening and dewatering are carried out on site. There are also sludge digestion and storage facilities. The treatment plant currently occupies an area of 7 hectares.

- 8.6.2 The current system drains entirely under gravity - there are no pumping stations within the drainage network, other than one within the confines of the WWTP. The treatment plant is located near the River Suir on the Davis Road to the east of the town. There are eleven known Combined Sewer Overflow (CSO) discharges from the sewerage network.
- 8.6.3 The majority of the catchment is served by combined sewers, the exception being the northern catchment which is wholly separate. The last major refurbishment carried out on the network was completed in 1980. New sections of sewers have been added to the network in recent years. Four trunk combined sewers lead to the WWTP, each serving separate catchments within Clonmel town (Eastern Sewer, Interceptor Sewer, Southern Sewer and Northern Sewer).
- 8.6.4 The trunk combined sewers were assessed by consultants on behalf of the Council as part of the Main Drainage Strategic Review (2001). This report assessed the capability of the trunk sewers to cater for future development within Clonmel based on a storm with a 20-year return period and duration of 60 minutes. The report found that three of the four trunk sewers have sufficient capacity to cater for the future development. It is likely that much of the old network (storm and foul water) adjacent to the town centre will be rehabilitated during the lifetime of this Plan.

Policy EM.7: Wastewater Discharge **The Council will collect the foul sewerage from within the town and environs and discharge it after treatment in a safe and sustainable manner.**

Policy EM.8: Wastewater Separation **The Council will separate foul and surface water drainage systems where feasible, in order to reduce the volume of material entering the treatment plants and to ensure that all new developments provide separate on-site foul and surface water drainage systems.**

- 8.6.5 Development will only be permitted where the Council is satisfied, after relevant consultation, that adequate provision for water and wastewater can be made, consistent with the sustainable management of water and wastewater services and other environmental considerations.

8.7 Waste Management

***Policy EM.9:
Waste
Management***

The Council will seek to implement the Joint Waste Management Plan for the South East Region (2006) which identifies short, medium and long-term objectives for:

- Public awareness and education;
- Prevention and minimisation;
- Waste collection and charging;
- Waste recovery and recycling;
- Waste treatment/Final disposal;
- Unauthorised landfilling;
- Location of waste management facilities;
- Litter prevention;
- Sludge management;
- National Hazardous Waste Management Plan;
- Priority waste streams;
- Market development;
- Policy on Joint Management and Procurement; and
- Complaints.

- 8.7.1 The waste policies established by the 2002 Plan are adopted by this Plan, including the implementation of the 'polluter pays' principle with regard to all waste management initiatives, and to monitor the production, storage and movement of hazardous and dangerous waste within the town.

***Policy EM.10:
Polluter Pays***

The Council will implement the 'polluter pays' principle with regard to industrial and agricultural discharges, and to implement the provisions of the water pollution and environmental protection legislation and regulations thereunder.

8.8 Pollution Control

- 8.8.1 The control of pollution needs to be fully considered as part of proposals for development, including the need to separate potential polluting and other land uses to reduce conflicts, the possible impact of potentially polluting development on land use and the need to protect natural resources and improve the physical environment.

***Policy EM.11:
Pollution***

Planning permission will not be granted for development which could give rise to air, noise, light or water pollution or soil contamination where the level of discharges or emissions is significant enough to cause harm to other land uses, health or the natural environment. The effectiveness of proposed mitigation measures will be fully taken into account.

- 8.8.2 This policy is intended to ensure that the impact of sources of pollution is fully taken into account at an early stage in the development process. It includes consideration of the sensitivity of the locality to pollution effects and the existence of features which could be subject to damage from pollution; the loss of amenity which may arise through pollution; the extent of contamination of the site; the potential polluting effects of vehicles accessing the site; the hours of operation of a development where this may have an impact on neighbouring land uses; as well as the possibility of nuisance arising from the land use.

- 8.8.3 The Council will also seek to pursue the elimination of fly-tipping and regulation and control of the disposal of builders spoil and rubble.

***Policy EM.12:
Waste
Management***

The Council will strive to eliminate all unauthorised fly-tipping and to regulate and control the disposal of construction and demolition waste arising within Clonmel and its environs. Where significant construction and demolition waste is envisaged arising from a proposed development, the Council will seek waste management plans to be included as part of the planning application.

- 8.8.4 Construction and demolition waste is seen as an inevitable by-product of the building industry and the Council will seek to reduce the quantity of such waste that goes to landfill and to ensure that it is recycled where possible.