

Chapter 7 Infrastructure

7.0 Introduction

The requirement for the expansion of Waterford's public infrastructure is derived from both the unprecedented development levels experienced in the County up to 2008, and the estimated needs of the future development patterns in the County. The achievement of an appropriate balance between infrastructure provision and land use zoning establishes an effective and efficient foundation for future capital investment in road, water supply, wastewater treatment and waste management projects in the County.

Policy INF 1

To protect and where necessary enhance the quality of service infrastructure that will promote socio-economic development and environmental objectives in the County, and improve the quality of life for its citizens.

Policy INF 2

Where specific water or wastewater projects are proposed in individual settlements, these are set out in the Development Objectives in Volume 2 – The Map Booklet. An Infrastructural Capacity Assessment of each of the zoned settlements is set out in Appendix A4.¹

7.1 Transport

As Waterford is a predominantly rural County characterised by a dispersed network of small to medium sized settlements, the National, Regional and Local roads provide the physical connections that are essential to meet the daily transport requirements of its citizens. National and international travel from the County is also possible via the National rail network, Waterford Regional Airport and the sea ports.

¹ The need for an upgrade of the WWTP and associated wastewater infrastructure is recognised in this Plan, especially to avoid adverse effects on the freshwater pearl mussel population in the River Clodiagh, and the Council will endeavour to obtain priority status for these works.

7.2 Road Network

National Routes are major long distance through routes that provide the connections between County Waterford and its surrounding counties, cities, towns and air/sea port facilities. There are approximately 108km of such roads in the County and they carry a high percentage of the total traffic volume in Waterford. There are 23 Regional Roads in the County (382km) and they represent the next tier in the road hierarchy. County Roads make up the third tier in the road hierarchy and there are approximately 2035km of such roads in the County.



N25 National Route

The National Road network is under the remit of the National Roads Authority, whilst the Council is responsible for the maintenance and extension of both the Regional and County roads.

Requirements with regard to Road Safety Audits and Traffic Impact Assessments are set out in Section 10.2.3 of the County Development Plan.

Objective INF 1

It is an objective of the Council to protect the carrying capacity of the National Roads and associated junctions in the interest of road safety.

7.2.1 National Routes

The National Routes in County Waterford include the N25 (Extending from Youghal to Waterford City) and the N72 (Extending from Tarrs Bridge, Dungarvan to the County boundary north west of Tallow). The National Development Plan 2007 – 2013 identifies several key routes as strategic route corridors (e.g. Atlantic Road Corridor), and the continued development of these roads is essential for the future socio-economic development of the County. As per the National Policy Transport 21, Waterford County Council will generally not permit, (apart from the exceptions set out in Section 10.2.1 of Chapter 10 Development Standards), any development which requires direct access onto a National Route in an area where the maximum speed limit applies. However, the location of new National Road access points for residential, commercial, industrial or other development uses are open to consideration in built-up areas where speed limits of 50-60kmph apply. Sightline

requirements for National Roads are set out in Section 10.2.4 of this Plan. Given safety requirements, no reductions in sightline requirements will be permitted on National Roads.

7.2.2 Regional Routes

These roads link the settlements within the County and the South East Region whilst also acting as feeder routes to the National Road network. In recognition of the strategic importance of this road network to the future development of the County and in accordance with the *Sustainable Rural Housing Guidelines* as set out by the DoEHLG, the carrying capacity and safety of Regional Roads will be protected as far as is practicable through the imposition of restrictions on new access points. Exceptions to the restriction of new access points onto Regional Roads are set out in Section 10.3.2 of Chapter 10 Development Standards. Appendix A5 sets out the Schedule of Regional Roads in the County. Sightline requirements for Regional Roads are set out in Section 10.2.4 of this Plan. It should be noted that the National Road sightline requirement will apply in some cases (R672, R675, R676 & R708). Given safety requirements, no reduction in sightline requirements will be permitted on Regional Roads.



R675 Regional Route

7.2.3 County Roads

As these roads make up over 80% of the County's road provision, and as in excess of 77% of travel to work in the County is by private vehicle, they provide the vital connections between communities, facilities and places of work, which are fundamental to the operation of daily life within the County. In general, the principle of accessing appropriate development from local roads is acceptable to the Planning Authority subject to the site suitability criteria and road safety considerations as set out in Sections 10.2.2, 10.2.3 and 10.2.4 of Chapter 10 Development Standards.



L-6055 County Road

Policy INF 3

To protect the efficient and safe operation, and facilitate the ongoing development of National, Regional and County Roads throughout Waterford in accordance with the National Development Plan 2007-2013 and Transport 21. The Planning Authority shall have regard to the Spatial Planning and National Roads (Draft) Guidelines for Planning Authorities and any subsequent guidelines on road planning that may be issued from the DoEHLG or the Department of Transport during the lifetime of this Plan. The Planning Authority shall consult with the NRA in the preparation of any Masterplan which may affect the carrying capacity of a National Road.

7.3 Major Road Development Proposals

In seeking to consolidate and improve the County's existing roads whilst also further expanding the network, the Council propose the following development works subject to the availability of funding:

- Ballinacourty Road Realignment and Improvements;
- Completion of Riverstown Relief Road, Tramore;
- Construction of a new roundabout and improvements on the existing N25 at Holy cross, Butlerstown;
- Dungarvan Outer By-Pass;
- Dunmore East – Ballymabin to Killea relief road;
- Gold Coast Road Upgrade;
- Lismore/Cappoquin Bypass;
- Portlaw Relief Road;
- Realignment of R685 from Pickardstown to the R708 Airport Road;
- Realignment of the Glen Road in Tramore; and
- Tallow Relief Road and Traffic Management Plan.

These proposals seek to improve connections to the National Road network, and combined with appropriate traffic calming measures will also enhance safety levels and relieve areas of traffic congestion.

Waterford County Council supports the Cork/Waterford and the Waterford/Limerick Atlantic Corridor. The Council also supports the Rosslare/Limerick Rail improvements.

Where specific roads projects are proposed in individual settlements, these are set out in the Development Objectives in Volume 2 – The Map Booklet.



Tallow Relief Road

Objective INF 2

Subject to appropriate funding the Council will continue to maintain and improve where possible the R671/R672 Regional Road from Dungarvan to Clonmel.

Objective INF 3

It is an objective of the Council to support major improvements by reserving such corridors of any such proposed routes free of developments that would interfere with such improvements.

7.4 Traffic Management

Significant investment by the Council in traffic management infrastructure such as that in Kilmeaden has resulted in marked reductions in traffic congestion, vehicle speeds and accidents, whilst also promoting both walking and cycling. To ensure the achievement of these benefits, the Council promotes the use of appropriate traffic calming measures, parking byelaws, an improved public transport system and enhanced pedestrian/cyclist facilitation. Appropriate setback reserves for



Cyclist/Pedestrian Signage

the approach roads within designated settlements (as set out in Volume 2 – The Map Booklet) will facilitate future traffic calming measures whilst also enhancing cyclist and pedestrian provision.

7.5 Parking

The Council proposes public car park developments, subject to funding availability, during the Plan period in Bunmahon, Cappoquin, Dunmore East, Kilmacthomas, Passage East, Tallow and Tramore (these include the upgrade of existing car parks and the provision of new car parks). The Council will use car parking management options such as short term car parking, limited period free parking etc, to optimise the use of public car parking spaces, where appropriate.

The parking requirements for private developments are set out in Section 10.56 of Chapter 10 Development Standards.

Policy INF 4

To ensure the adequate provision of off-street car parking in urban areas to meet the needs of local residents, shoppers and businesses.

7.6 Transport Modal Split

The National Spatial Strategy, the Regional Planning Guidelines, Transport 21, the National Cycle Policy Framework, and the Waterford Planning, Land Use and Transportation Study seek to develop a sustainable transportation system which reduces travel times and fuel consumption. Whilst constant factors such as our temperate climate and largely rural based society have maintained our over-reliance on the private motor vehicle, other more recent factors including the improved road network, a growing population, higher incomes and a lack of appropriate public transport alternatives have further increased this dependency. Analysis of Central Statistic Office figures illustrate that private motor vehicle usage for travel to work in Waterford increased from 75% in 2002 to 77.9% in 2006 and Nationally from 70% to 71.4%, whilst all other modes of transport have experienced decline.



Cyclist Signage

Means of Travel	Waterford		% Change	State
	2002	2006		2006
Private Vehicle	75.0%	77.9%	2.9%	71.4%
Walk	13.2%	12.0%	-1.2%	11.0%
Cycle	1.5%	1.3%	-0.2%	2.1%
Bus	2.5%	2.3%	-0.2%	6.1%
Train	0.4%	0.1%	-0.3%	3.0%
Motor Cycle	1.3%	0.7%	-0.6%	0.7%
Work at Home	6.1%	5.7%	-0.4%	5.7%

*The statistics where mode of transport was 'not stated' or 'other' have not been included.

Table 7.1 Modal Split of Travel to Work 2002 - 2006

The modal split in the County is becoming increasingly unsustainable and a greater balance of transport modes must be achieved through the promotion of improved public transport service provision and enhanced integration between transport modes. The requirement for this is further underlined by the fact that 60.5% of all persons in Waterford in 2006 lived more than 2km from their place of work.

Policy INF 5

To support and co-operate with public and private transport operators in the provision of an effective, attractive and sustainable transport service and in the development of key infrastructural requirements such as bus lay-byes and set-down locations in appropriate urban and rural locations.

Policy INF 6

To support and liaise with Waterford City Council in the implementation of the recommendations of the Waterford Planning, Land Use and Transportation Study, and to support the Waterford City and Environs Transportation Feasibility Study where appropriate, during the lifetime of the Plan.

7.7 Public Transport

7.7.1 Bus Eireann Services

Bus Eireann provides both expressway and local routes in the County, servicing towns and villages such as Ardmore, Ballymacarbry, Bunmahon, Cappoquin, Dungarvan, Dunhill, Kilmacthomas, Kilmeaden, Lismore, Stradbally and Tallow. Bus Eireann also operate a wide range of services linking Dungarvan and Waterford with all major cities. There are services from Waterford and

Dungarvan to Youghal, Midleton and Cork City, with onward connections to Killarney and Tralee. Likewise there are hourly services from Dungarvan to Waterford with onward connections to Dublin, Limerick and Wexford. In addition to the existing service provision, additional routes are proposed from Waterford City to Kilkenny and Portlaw. In recognition of an expected 95% growth in travel demand by 2020 in Waterford City and its hinterland, Bus Eireann aims to increase its frequency of services to the satellite towns of Kilmeaden and Tramore whilst also improving the quality of the fleet and service offer.

Policy INF 7

To support the extension of the public bus services, especially in expanding urban areas, by seeking the provision of public transport infrastructure, such as bus stops, shelters, etc as part of new developments.

7.7.2 Private Bus Operators

The Department of Transport's Register of Licensed Road Passenger Transport Operator includes 37 such operators for County Waterford. Whilst the majority of these operators provide non-scheduled services, at present 5 of these provide 9 designated bus routes in the County, in conjunction with scheduled links to Youghal, Wexford and Dublin Airport.

Policy INF 8

To support public and private bus operators in the provision of a well functioning, integrated public bus network, which enhances Waterford's competitiveness, encourages economic improvement, promotes balanced regional development and contributes to social inclusion.

7.7.3 Non-Scheduled Transport Services

There are 581 privately owned public service passenger vehicles operating in Waterford consisting of 183 buses, 260 taxis, 83 hackneys and 55 limousines. At present 11.5% of the taxis operating in the County are wheelchair accessible which is greater than the National average of 7.5%. However, on a per capita basis the number of taxis and hackneys operating in Waterford is below the National average.

Policy INF 9

Waterford County Council will support the provision of taxi rank facilities at appropriate locations within the County's designated settlements during the lifetime of the Plan.

7.8 Rural Transport

The Déise Link Community Transport Service was established under the Rural Transport Programme in 2001. With the assistance of Waterford County Council, Pobal and the



Department of Social Protection this service seeks to promote social inclusion through the provision of a door-to-door accessible and affordable rural transport service. Déise Link operates 16 rural transport routes providing an essential link for persons living in rural areas to the service centres of Ardmore, Ballymacarbry, Cappoquin, Carrick-on-Suir, Dunhill, Dunmore East, Kilmacthomas, Lismore, Portlaw, Stradbally and Tallow. The demand for the service is evident in the large numbers of persons using it (46,000 persons in 2008).

In recognition of the importance of improving access to and from rural locations, the Council supports the extension of the Rural Transport Programme throughout the County during the lifetime of the Plan. To assist and compliment the Programme and other such initiatives which respond to local travel needs, the Council will seek to enhance the facilitation of new bus stop and shelter infrastructure in settlement centres and key rural locations throughout the County. The appropriate co-locating of transport service provision at these bus stops will be encouraged by the Council where practicable.

Policy INF 10

To support the Rural Transport Initiative and the provision of an integrated public transport system as a means of reducing social isolation and as a viable long-term sustainable public transport option.

7.9 Park and Ride Facilities

Park and ride facilities are an integral component of the Council's strategy to encourage the use of public transport facilities. Park and Ride site locations should be located at or before the beginning of areas of expected traffic delays, at or before the beginning of bus priority measures or at the finish of

dual carriageways. The development of park and ride facilities shall be facilitated by the inclusion of quality bus corridors on appropriate routes into Waterford City.

Policy INF 11

The Council will seek to liaise with Waterford City Council and the National Roads Authority in regard to the provision of park and ride facilities, quality bus corridors and other appropriate traffic management measures in the City Environs.

7.10 Rail Transport

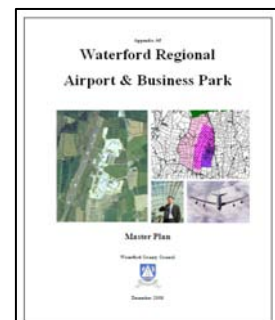
Waterford County Council supports the continued expansion of both passenger and cargo transport on the existing rail system. The Council also supports the reinstatement of the rail link between Kilmeaden and Waterford City which has potential as a commuter line or part of an integrated tourism product.

Policy INF 12

To support the carrying out of a detailed study in co-operation with local and statutory agencies to assess the potential of a commuter rail service for the Gateway City's satellite towns of Tramore and Kilmeaden.

7.11 Waterford Regional Airport

Waterford Regional Airport is located approximately 9km to the south east of the Gateway City of Waterford and 5km north east of the Secondary Service Centre of Tramore. The airport is a key gateway to Ireland's south east and the availability of its convenient and increasingly frequent air services is making a growing contribution to the facilitation of both tourism and business activities in the region. A Masterplan for the Airport and adjoining business park is set out in Appendix A6.



Objective INF 4

To assist the future expansion of services and routes at the Airport, the Council support the lengthening and widening of the runway, subject to compliance with proper planning and sustainable development and in compliance with Article 6 of the Habitats Directive.

7.12 Sea Ports, Harbours and Piers

The Port of Waterford at Belview is located on the eastern bank of the River Suir in the administrative area of Kilkenny County Council and is approximately 6km down river from Waterford City and 22km from the open sea. The recently extended port, which handled 2.5million tonnes of cargo in 2008 and operates 24 hours a day, has scheduled container services to Rotterdam (Holland), Zeebrugge (Belgium) and Belize (Central America). The port currently handles bulk liquid, bulk solid and break-bulk/general cargo and 14% of lift-on/lift-off (lo-lo) cargo to mainland Europe. The continued improvement of the Atlantic Corridor route and the N11 coupled with the fact that Waterford is the closest Irish port to mainland Europe maintains and potentially increases its attractiveness to exporters and importers and the tourism sector. The Council recognises that the continued development of Belview Port is of strategic importance for the development of industry, tourism and commerce for both the County and the wider South East Region.

Waterford, as a coastal County with an extensive inland waterway, supports a significant number of water based commercial and recreational activities. In addition to waterborne commercial transport, these activities include boat hire, sea angling, pier/shore angling, adventure sports and festivals such as the Festival of the Sea and the annual Passage East Mussel Festival. Commercial fishing, fish processing, aquaculture and related activities also generate significant employment in the County. Dunmore East is the largest and busiest fishing port in the County and proposed extension plans will strengthen its position in future years. In recognition of the socio-economic contribution of Dunmore East, Heilbhcic and the other harbours, piers and slips throughout the County, the Council, in conjunction with the relevant Government Departments, supports and encourages the future maintenance and improvement of harbours and piers. Such works must take place in the context of the Council's commitment to the protection of wildlife and sensitive habitats and avoid adverse impacts on land/seascapes.



Heilbhcic Pier

Policy INF 13

To improve access to, and support the sustainable development of, all piers and harbours within the County, for both commercial and recreational purposes (Section 8.19 will apply).

7.13 Smarter Travel

Smarter Travel – A Sustainable Transport Future (2009) is a new transport policy for Ireland covering the period 2009-2020. It sets out five key goals:

- To reduce overall travel demand;
- To maximise the efficiency of the transport network;
- To reduce reliance on fossil fuels;
- To reduce transport emissions; and
- To improve accessibility to transport.

The policy is aimed at reversing unsustainable travel patterns through the promotion of walking, cycling, car pooling etc, Furthermore the policy is focused on improving the environment and people's quality of life through the associated health benefits of sustainable modes of transport.

Cycle facilities shall be incorporated into the design and layout of developments schemes as appropriate including road schemes and development schemes in accordance with the National Cycle Policy Framework, Department of Transport 2009, and any subsequent documents to be released on foot of same, providing guidelines and standards.



Cyclist Provision at Clonea Road Roundabout

Policy INF 14

To implement the smarter travel policy framework as produced by the Department of Transport and to encourage the sustainable creation of cycle and pedestrian friendly communities through the provision of cycle paths and other initiatives to curtail the dependency on private motor vehicles whilst seeking to minimise the depletion of the hedgerow resource that could potentially arise from cycle path provision.

Objective INF 5

It is the objective of the Council to support the policies of the 'National Cycle Policy Framework 2009-2020-Smarter Travel', Department of Transport, April 2009 while ensuring that any environmental effects of the implementation of the policies are fully assessed and adequately mitigated.

Objective INF 6

It is the objective of the Council to promote the sustainable development of safe and convenient pedestrian and cycling facilities in the towns and villages, to minimise the dependence on private motor vehicles, and to encourage an active and healthy lifestyle. New and upgraded road developments will be encouraged to integrate cycle lanes. These will include urban/village developments and short distance routes.

Objective INF 7

Require planning applications for residential, commercial, retail, community, educational and industrial developments to demonstrate the proposal's accessibility for pedestrians and cyclists. The Council will also seek the provision of appropriate, well-designed pedestrian ways for residential development proposals to link with amenities and facilities. Such proposals shall adhere to the Guidelines on Sustainable Residential Development in Urban Areas and Urban Design Manual (DoEHLG May2009).

7.14 Cycling and Pedestrians**7.14.1 Cycling**

Cycling is an environmentally friendly mode of transport which can help create a healthier population, safer communities and reduce traffic congestion. As such, provision for cyclists is an essential element of any integrated transport system. The National Cycle Policy Framework and the Cycle to Work Scheme launched by the Government in 2009 further emphasises this requirement, and is in line with the National sustainable development strategy, '*Sustainable Development – A Strategy for Ireland*', which identifies the need for the increased provision of cycle lanes. The Council supports the extension of a cycle path network to the towns and villages throughout the County. Studies will be undertaken during the life of the Plan to investigate the potential for the development of cycle lanes between settlements with the concept of developing a broader cycling network. Further provision of cycle lanes and bicycle



Sean Kelly Tour Passing Dromana Bridge

parking will be ensured through the application of the policies as set out in Chapter 10 Development Standards, Sections 10.5, 10.10 and 10.56.

7.14.2 Pedestrians

Walking is the most basic form of transport and there are many environmental, health and socio-economic benefits associated with this activity. Central Statistic Office figures show that since 2006 there has been a slight decline in the numbers of people walking to work in the County. To enhance the provision for pedestrians in the County's towns and villages, setback reserves for the approach roads within designated settlements (as set out in Volume 2 – The Map Booklet) will facilitate future traffic calming measures whilst also enhancing cyclist and pedestrian provision. Any future pedestrian developments should comply with the provisions of the Disability Act 2005 and the standards as set out in the National Disability Authorities '*Access for Everyone*' publication. Facilities for pedestrians and access facilities for people with special mobility needs will be improved in line with the aims of the European Charter of Pedestrian Rights (1988).

Policy INF 15

The Council encourages a high quality of design and layout proposals within urban areas, which strive for universal accessibility for pedestrians, to provide adequate and convenient access to public transport and reduce the dependence on the private motor car.

7.15 Water Services

Waterford County Council is responsible for maintaining, improving and extending the County's water supply, wastewater collection, treatment and drainage infrastructure whilst protecting and enhancing the natural environment.

7.15.1 Water Services Investment Programme

The Water Services Investment Programme (WSIP) 2010 – 2012 is the latest version of a rolling, multi-annual capital investment programme that commenced in 2000 for the provision of new and upgraded water supply and wastewater systems in Ireland. The WSIP is a three-year rolling funding plan for the provision of major water supply and wastewater infrastructure. Together with the Rural Water Programme, it plays a key role in:

- Preserving and protecting our water resources;
- Achieving good status in waters by 2015 and ensuring that water quality does not decline in any waters, in accordance with the Water Framework Directive;
- Meeting National and EU standards for drinking water and wastewater treatment;
- Putting critical infrastructure in place that will support economic and employment growth; and
- Prioritising water conservation works.

SCHEME	CONTRACT	RBD	APPROVED COST
Ardmore Water Supply Scheme	Contract 1 – Source & Reservoir	SE	€3,257,000
Ballinacourty/Deelish Water Supply Scheme	Contract 1 – Reservoir & Trunk Main	SE	€610,000
Ballinroad Sewerage Scheme	Rising Main	SE	€1,140,000
Checkpoint Sewerage Scheme	WWTP and Collection System	SE	€2,307,000
Clonea Power Sewerage Scheme	WWTP	SE	€400,000
Dunmore East Water Supply Scheme	Contract 1 – Corballybeg Booster Pump	SE	€206,000
Lismore Sewerage Scheme	WWTP Upgrade	SW	€1,140,000
An Rinn/Heilbhic Water Supply Scheme	Source, Reservoir & Network	SE	€5,877,000
Water Conservation Stage 3	Phase 1 Rehab Works	SE/SW	€4,405,701
Water Conservation Stage 3	Phase 2 Rehab Works	SE/SW	€4,466,694
West Waterford Water Supply Scheme Stage 1	Finisk Borehole & Reservoir	SW	€525,000
Waterford Grouped Towns & Villages Sewerage Scheme	Contract No. 1 – Ardmore Collection System (CS)	SE	€4,497,000
“	Contract No. 1A – Ardmore Interim Treatment System	SE	€798,000
“	Contract No. 2 – Ballyduff/ Kilmeaden CS	SE	€2,765,000
“	Contract No. 3 – Cappoquin CS	SW	€3,250,000
“	Contract No. 4 – Dunmore East CS	SE	€9,816,000
“	Contract No. 6 – Stradbally CS	SE	€1,218,000
“	Contract No. 8 – WWTP DBO	SE/SW	€29,200,000
TOTAL FUNDING			€75,879,000

Table 7.2 – Schemes/Contracts to go to Construction in 2010 – 2012

Scheme	Contract	RBD
Ballinacourty/Deelish Water Supply Scheme	Contract 2 – Network	SE
Ballyduff Upper Sewerage Scheme	WWTP & Collection System Contract	SW
Carrick-on-Suir/Rathgormack Water Supply Scheme	Treatment Upgrade & Network	SE
Dungarvan Water Supply Scheme	Source Augmentation, Reservoir and Network	SE
Dunmore East Water Supply Scheme	Reservoir & Network Contract	SE
Passage East Sewerage Scheme	WWTP Upgrade Contract	SE
Tramore Sewerage Scheme Stage 2	Collection System Upgrade for Existing and Future demand	SE
West Waterford Water Supply Scheme	Stage 1 Phases 2 & 3 and Regional Scheme	SW
Water Conservation Stage 3	Phase 3 Rehabilitation Works	SE/SW

Table 7.3 - Schemes/Contracts at Planning Stages 2010-2012

7.16 Water Supply

The Council provides a public water supply via a network of 108 water supply schemes throughout the County. The breakdown of the water volume extracted from the variety of sources is as follows:

Source	Waterford	National
Surface Water	75%	84%
Ground Water	21%	9%
Spring	4%	7%



Coumshingaun Corrie Lake

To maintain and enhance the quality and volume of drinking water in the County, the Council continually monitors the supplies, whilst also engaging in both maintenance and capital projects.

Policy INF 16

The Council will comply with the European Communities (Drinking Water) Regulations 2007 and maintain and enhance the quality and volume of drinking water supply in the County.

Objective INF 8

To identify over the lifetime of the Plan suitable areas for the impoundment of surface water for the future provision of water supplies and develop a strategy for their development. Reservoir impoundments shall generally be favoured in agricultural/greenbelt lands or on other land uses which the Planning Authority may deem suitable.

Objective INF 9

To address water supplies within the County listed on the EPA's Remedial Action List and take appropriate measures to upgrade treatment facilities and improve drinking water standards.

7.16.1 East Waterford Water Supply Scheme

This scheme serves Waterford City and the eastern part of the County, including the towns of Tramore, Dunmore East, Cheekpoint, Faithlegg and Passage East. Stage 2, Phase 2 of this scheme provides for a duplication in treatment capacity of the Adamstown Water Treatment Plant as well as the provision of a new water intake facility on the River Mahon at Seafield to augment the existing sources of supply. The expanded treatment system has been online since mid 2010.



East Waterford Water Supply Scheme

7.16.2 West Waterford Water Supply Scheme

The development of a Regional Water Supply Scheme for the west of the County is one of Waterford County Council's most important strategic objectives. The West Waterford Water Supply Scheme Strategic Review as well as the West Waterford Water Supply Scheme Stage 1 Area Improvement works are considered interim steps towards realising this overall strategic objective.

The Strategic Review covers an area of 820km² in the west of the County and looks at the possibility of a single regional water supply scheme to provide water for the area. There are some 53 water supply schemes in the area that could be supplied from such a scheme and a number of these are currently experiencing water supply shortages or quality issues. It is considered that a Regional Water Supply Scheme will resolve many of the problems associated with the current water supply problems in the West Waterford area.

The West Waterford Water Supply Strategic Review and the Stage 1 Area Improvement Reports have assessed source availability in the region. It is envisaged that Stage 1 Area Improvement works would be carried out initially and this relates to augmenting the Tallow and the Lismore/ Cappoquin/ Ballyduff Water Supply Schemes and rationalising some smaller schemes in the vicinity of these larger schemes.

7.16.3 Rural Water Strategic Plan

The Rural Water Strategic Plan was approved by the Council in 2003. The focus of the Plan was the existing water supply/demand balance, the need to meet future demand and the provision of satisfactory levels of service up to 2021. This required that adequate water resources and associated treatment capacities would be available to cater for projected demands, that the water supply infrastructure would be adapted to meet these additional requirements, and that the appropriate operating practices would be put in place to maintain capability. Unprecedented levels of new development since 2003 have placed additional pressure on the existing water supply infrastructure. To deliver on the Rural Water Strategic Plan the Council is progressing the following strategic actions:

- Water conservation and mains leakage control;
- Capital investment and scheme rationalisation;
- Mains rehabilitation; and
- Demand management.

7.16.4 Water Conservation

Stages 1 & 2 of the National Water Conservation Programme have been completed by Waterford County Council and these stages introduced a Water Management System and Active Leakage Control to the water supply network on a County-wide basis. Stage 3 of the Programme relates specifically to Mains Rehabilitation for which the Council has prepared a detailed three-phase programme of works involving the upgrading and replacing of 101km of water supply mains. The Mains Rehabilitation Programme is prioritised in the Needs Assessment 2009 report. The Council will continue to implement a Water Conservation Programme and take measures to redress water leakage rates in the County.

7.16.5 Other Water Supply Schemes

The following schemes have been included for upgrading in the Needs Assessment 2009 report:

- An Rinn/Heilbhc Water Supply Scheme;
- Ardmore Water Supply Scheme;
- Carrick-on-Suir/Rathgormack Water Supply Scheme;
- Deelish/Ballinacourty Water Supply Scheme;
- Dungarvan Water Supply Scheme;
- Dunmore East Water Supply Scheme;
- Faithlegg Water Supply Scheme;
- Kilmacthomas Water Supply Scheme; and
- Portlaw Water Supply Scheme.

7.16.6 Water Pricing Policy

In accordance with the National Water Pricing Policy which came into effect in January 2007, Waterford County Council introduced a water supply and wastewater treatment charge for all non-domestic customers.

A major programme of metering of all non-domestic properties is now complete, and in line with the Polluter Pays Principle the full cost of the water supply and wastewater treatment service is levied on the customer. Domestic customers are exempt from the payment of such costs as this service is funded through the Local Government Fund.

Policy INF 17

To implement the Polluter Pays Principle with respect to non-domestic connections to water supply and wastewater schemes.

7.17 Wastewater Collection and Treatment

The Dungarvan and Environs Collection System and Wastewater Treatment Plant became operational in 2007 and enable the Council to conform to statutory EU/National environmental and public health standards. The WWTP at Ballinacourty has a population equivalent of 25,000 persons and treats the

wastewater from Dungarvan, Abbeyside and Clonea/Ballinacourty while the plant at Baile na nGall in the An Rinn Gaeltacht on the southern side of Dungarvan Bay treats the wastewater from the area of An Rinn/Heilbhic and can cater for a population equivalent of 1,600 persons. The plants are capable of modular expansion should the need arise.

The Tramore Wastewater Treatment Plant at Crobally Upper also became operational in 2007 and was designed to treat wastewater for a population equivalent of 20,000, thus enabling it to cope with the seasonal nature of population fluctuations in this Town whilst also catering for the future expansion of the Town.



Dungarvan & Environs and Tramore Wastewater Treatment Plants

7.17.1 Waterford Grouped Towns & Villages Sewerage Scheme

The Waterford Grouped Towns & Villages Sewerage Scheme will provide new, modern wastewater treatment plants and upgraded foul and stormwater collection systems in Ardmore, Ballyduff/Kilmeaden, Cappoquin, Dunmore East, Kilmacthomas, Stradbally and Tallow. The objective of the scheme is to allow sustainable development that is in compliance with the Urban Wastewater Treatment Regulations to take place in each of these towns and villages.

The design of the schemes will ensure that adequate wastewater treatment capacity will be available for a design horizon year of 2031. The following table outlines the wastewater treatment design capacity for each town and village in terms of population equivalent (P.E.).

Settlement	Design Capacity P.E.
Ardmore	3,377
Ballyduff/Kilmeaden	1,098
Cappoquin	2,556
Dunmore East	8,314
Kilmacthomas	1,902
Stradbally	1,185
Tallow	2,527

Table 7.4 Proposed Wastewater Treatment Plant Design Capacities

Objective INF 10

To secure the sustainable development of the priority wastewater treatment and water supply schemes in the Water Services Investment Programme 2007-2009 during the lifetime of the Plan.

7.17.2 Waste Water Treatment Schemes

The following schemes have been included for upgrading in the Needs Assessment 2009 report:

- An Sean Phobal Sewerage Scheme;
- Ballyduff Upper Sewerage Scheme;
- Bunmahon Sewerage Scheme;
- Checkpoint Sewerage Scheme;
- Clonea Power Sewerage Scheme;
- Dunhill Sewerage Scheme;
- Lismore Wastewater Treatment Plant upgrade;
- Portlaw Sewerage Scheme;
- Rathgormack Sewerage Scheme;
- Touraneena Sewerage Scheme; and
- Tramore Collection System Stage II.

7.18 Integrated Constructed Wetlands

Waterford County Council continues to lead the way in the development and use of surface-flow emergent vegetation constructed wetlands for the treatment of wastewater and greywaters. The system is based on the free surface-flow of water through a series of sequentially linked shallow ponds vegetated with a range of emergent plant species. In the Irish context, integrated constructed wetlands were first used in the Anne Valley in County Waterford. Integrated constructed wetland systems may be used for the management of agricultural point sources of wastewater and for the treatment of sewage of varying scales ranging from single houses to villages/towns and for some industrial waste waters. The construction of wetlands requires planning permission, and effluent discharge licences under the Local Government (Water Pollution) Acts.



Integrated Constructed Wetland at Dungarvan Landfill

Policy INF 18

To continue to work with the DoEHLG Water Services to research the use and potential further sustainable development of Integrated Constructed Wetlands in the Anne Valley and in other appropriate locations throughout the County and to support the development of wetlands at such locations.

Policy INF 19

The Council will facilitate where possible the provision and improvement of water supply and wastewater collection/treatment schemes in the County in line with the Settlement Strategies as set out in Chapter 4 County Settlement Strategy.

7.19 Surface Water Drainage

Surface water run-off is the water flow which occurs when soil is soaked to full capacity and the excess water from rain or other sources flows over the land. It also occurs as rainwater run-off from roads, car parks, roofs and other non-porous surfaces. Research undertaken as part of the South

Eastern River Basin District Project indicates that this run-off is a source of sporadic pressures placed on the water quality in the Region. To alleviate these water quality and flooding issues the Council will require that surface water be disposed of on site (where possible), and the on-site drainage infrastructure will subsequently regulate the rate of discharge to established water bodies.

In urban areas surface water is typically disposed of to the foul/storm sewer network. During periods of high rainfall, snow melt or high tides these networks may become overloaded and lead to incidences of flooding. To reduce the potential for overloading of these networks, the Council require that all new developments incorporate sustainable drainage systems, and adhere to current best practice in the design, construction and maintenance of same. Current best practice guidance on Sustainable Urban Drainage Systems (SUDS) is available from the Greater Dublin Strategic Drainage Study. Given the extreme flooding that has impacted many areas of Ireland in the last number of years, it will be necessary to introduce stormwater attenuation as part of any SUDS system. It is recommended that attenuation systems be designed for a storm return period of 1-in-100 years. New developments should also minimise the areas of impermeable surfaces such as road, parking and patio surfaces and porous surface materials should be utilised where practicable.

In the case of one-off dwellings in rural areas that are unserved by a storm sewer network, or where the network has insufficient capacity to accommodate additional loading, surface water must be disposed of within the curtilage of the site through the use of appropriately sized soakpits.

Policy INF 20

The Council will require compliance with best practice guidance for the collection, reuse, treatment and disposal of surface waters for all future development proposals. Development proposals must demonstrate adequate water conservation, water quality protection, and surface water run-off rate regulation measures to prevent the increase of flooding issues in the catchment.

7.20 Waste Management

Waste management refers to the collection, transportation, processing and recycling/disposal of waste materials. The waste management issues in the South East may be, for the most part, attributed to the lack of appropriate licensed facilities, increased waste production levels, and the lack of suitable waste



Refuse Collection Vehicle

management behaviour. To tackle the mounting difficulties with waste in the Region, Waterford County Council in conjunction with the five other constituent local authorities adopted the Joint Waste Management Plan for the South East Region 2006. (Refer to Section 2.4.2 Framing Documents).

Policy INF 21

To implement the ‘Polluter Pays’ principle with regard to the collection, treatment and disposal of waste.

Policy INF 22

To implement the plans, policies and objectives as set out in the Joint Waste Management Plan for the South East Region 2006, the National Waste Prevention Programme 2009-2012 and the EPA’s National Hazardous Waste Management Plan at the Local Authority level.

Policy INF 23

The Council will facilitate the provision of civic amenity and bring sites in selected towns and villages in co-operation with local communities as resources allow.

7.21 Telecommunications

Telecommunications development has been the key driver of the Irish economy over the last decade. The provision of a modern, efficient and reliable telecommunication network is vital for the Waterford economy to compete for jobs and investment in an increasingly global market place, and to provide the citizens with quality access to information, education and entertainment. Waterford County Council recognises the importance of the continued development of the existing network, and will support and encourage a balanced spread of telecommunications infrastructure throughout the County. In the consideration of proposals for telecommunication masts, antennae, and ancillary equipment developers will be required to submit details of:



Communication Mast

- The potential for co-location of equipment on the existing mast infrastructure; and
- The visual impact of the proposed equipment on the natural and built environment, particularly in areas of sensitive landscape or cultural/historical importance.

The development of telecommunication masts and antennae in urban areas should be avoided where alternative locations are available.

Policy INF 24

The Council will facilitate proposals for the provision of telecommunication masts, antennae, underground infrastructure and ancillary equipment subject to normal planning considerations having regard to the DoEHLG publication '*Telecommunications Antennae and Support Structures - Guidelines for Planning Authorities*' (1996).

Objective INF 11

It is the objective of the Council to encourage the clustering and co-location of telecommunication masts, antennae or ancillary equipment and more favourable consideration will be given to their location near existing similar type structures.

Objective INF 12

It is the objective of the Council to ensure that where a permission is granted for telecommunication masts that it will generally be for a temporary period not exceeding 5 years. This will enable the Planning Authority to review the situation considering changing technology and the effect of the development on the amenities of the area. Subsequent applications may be for such longer periods as the Planning Authority may direct.

7.22 Broadband

Broadband is an always-on Internet connection that gives the users high-speed access and downloads for a flat rate monthly charge. Waterford County Council in partnership with the South East Regional Authority is managing the roll-out of the Department of Communications, Marine and National Resources '*South East Regional Public Access Network of Telecommunications*' (SERPANT). Under the SERPANT scheme, the Clár Programme, and the County Broadband Scheme, high speed broadband facilities have been installed in sixteen settlements throughout the County. The National Broadband Scheme will seek to extend the provision of such broadband facilities to consumers and businesses located within those parts of the County which have no form of broadband available at present. To advance the economic and social development of the County, the Council will support development proposals from both the private sector and community organisations for the provision of broadband infrastructure.

Policy INF 25

Waterford County Council will facilitate the expansion of broadband throughout all parts of the County.

Objective INF 13

It is the objective of the Council to facilitate developers and utility providers in meeting the requirements for utility services such as telecommunications, gas and electricity. Pre-planning application discussions with providers of telecommunication and ESB structures are encouraged.

Objective INF 14

It is the objective of the Council to support the co-ordinated and focussed development and extension of broadband infrastructure throughout the County. To this end the Planning Authority will seek to ensure that there is ducting for broadband fibre connections:

- a) Installed during the installation of services;
- b) In all new commercial and housing schemes; and
- c) During any work on roadways.

7.23 Energy

As an island nation on the periphery on Europe, Ireland requires a secure and reliable electricity supply that will support further economic development and enable us to compete for future foreign investment. Projects such as the proposed 38kv electricity supply line between Kilmacthomas and Kilmeaden are required to further develop this network. The settlements of Tramore and Kilmeaden in the east of the County are connected to the Bord Gáis Eireann National grid. Currently County Waterford is approximately 90-95% dependant on energy sourced from outside the County. In response to the greenhouse gas emission targets set for Ireland under the Kyoto Protocol, the National Climate Change Strategy 2007 – 2012 sets out a blueprint for the proposed way forward. Waterford County Council recognises that the increased utilisation of the County's indigenous energy resources in conjunction with the reduction in use of fossil fuels is imperative to developing a sustainable future for the people of Waterford. The



Overhead Power Lines

Council's policies with regard to Renewable Energy are set out in Section 8.8 of Chapter 8: Environment and Heritage.

Policy INF 26

1. To facilitate improvements in energy infrastructure and encourage the expansion of the infrastructure at appropriate locations within the County.
2. To support and facilitate the future expansion of the natural gas pipeline.
3. To facilitate, where appropriate, future alternative renewable energy developments throughout the County that are located in close proximity to the National Grid Strategy improvements so as to minimise the length and visual impact of grid connections.
4. To collaborate with EirGrid in accordance with the Grid 25 Strategy to facilitate the delivery of quality connection, transmission and market services to electricity generators, suppliers and customers utilising the high voltage electricity system at appropriate locations within County Waterford.

Objective INF 15

To support the development of hydro electricity in appropriate areas of the County. Hydroelectric plants shall generally be favoured in agricultural/greenbelt lands or on other land uses which the Planning Authority may deem suitable.