

Water Services Strategic Plan

A Plan for the Future of Water Services

Customer



Water



Wastewater



Environment



Growth



Investment



Safeguarding your water for your future

Irish Water at a glance...

Irish Water was created in

2013 and serves

3.3 million people producing over
1.6 billion Litres

of drinking water every day and taking wastewater away for treatment before it is returned to our rivers and seas.

Thousands of assets are operated and maintained to provide these services, including around:

900 *water treatment plants*

which deliver water through an estimated

60,000 kilometres of pipelines

We treat wastewater in more than

1000 wastewater treatment plants

and it is collected through an estimated

25,000 kilometres of pipelines

plus numerous pumping stations and sludge treatment centres.

Contents

Executive Summary	iii
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Chapter 1 Introduction	1
Transforming the Delivery of Water Services	1
Supporting Social and Economic Development	1
Our Responsibilities	2
Our Assets	3
Our Partners in delivering water services	3
Our Legal Context	3
Our Strategic Plan for 25 years	6
Planning for the Future	6
Our Strategic Objectives and Aims	9
How this Document is Laid Out	9

Chapter 2 Challenges and Strategic Priorities	11
The Current State of Water Services	11
Challenges over a 25 year Period	11
Building Our Capacity to Address these Challenges	14
Working With Our Regulators, Customers and other Stakeholders	15
Our Current Priorities	15

Chapter 3 Objective: Meet Customer Expectations	18
Introduction	18
The Current Situation	18
Key Challenges	18
Objectives and Strategies	20
Indicators and Targets	24

Chapter 4 Objective: Ensure a Safe and Reliable Water Supply	25
Introduction	26
The Current Situation	26
Our Main Legal Obligations	26
What our customers can expect from us	30
Objectives and Strategies	30
Indicators and Targets	39

Chapter 5 Objective: Provide Effective Management of Wastewater	41
Introduction	42
The Current Situation	43
Our Legal Obligations	43
Key Challenges	44
What Our Customers Can Expect from Us	45
Objectives and Strategies	47
Indicators and Targets	53

Continued overleaf

Contents *Continued*

Chapter 6 Objective: Protect and Enhance the Environment	55
Introduction	56
Our Legal Obligations	56
The Current Situation	58
What our Customers can Expect from Us	58
Key Challenges	58
Objectives and Strategies	59
Indicators and Targets	64
Chapter 7 Objective: Support Social and Economic Growth	65
Introduction	66
Our Legal Obligations	66
The Current Situation	66
Key Challenges	67
What our Customers can Expect from us	67
Objectives and Strategies	69
Indicators and Targets	74
Chapter 8 Objective: Invest in Our Future	75
The Current Situation	76
Key Challenges	77
What our Customers Can Expect from Us	77
Objectives and Strategies	78
Indicators and Targets	86
Glossary and Abbreviations	87
Tables	
Table 1 A Draft Timetable for the Delivery of Implementation Plans & Strategies	8
Figures	
Figure 1 Extent of Irish Water’s Responsibilities	2
Figure 2 Irish Water’s involvement in River Basin Management Plans	4
Figure 3 Relationship of this Tier 1 WSSP to the Tier 2 plans and Tier 3 projects and their relationship to the National Planning Framework	7
Figure 4 Benefits of Standardisation	14
Figure 5 Graphical Representation of a Water Supply Zone	28
Figure 6 Extent of Responsibility for Household Connection Pipe	34
Figure 7 Graphical Representation of a Strategic Water Supply Network	36
Figure 8 Wastewater Management System	42
Appendices	
Appendix 1 EPA Remedial Action List – Water Supply	92
Appendix 2 List of Areas from which Raw Sewage is Discharged	98
Appendix 3 Agglomerations identified in European Commission Infringement Case in respect of the Urban Wastewater Treatment Directive	101

Executive Summary

Our Vision

Effective water services, including the delivery of a sustainable and reliable clean water supply and safe disposal of wastewater, are essential for a modern country. This document presents the Water Services Strategic Plan prepared by Irish Water which provides, for the first time, an opportunity to consider, at a national level, the way that water services are delivered in Ireland. The plan takes a 25 year view towards the vision that

“Through responsible stewardship, efficient management and strong partnerships, Ireland has a world-class water infrastructure that ensures secure and sustainable water services, essential for our health, our communities, the economy and the environment”.

The plan has been prepared to comply with our statutory obligation and as a basis for broad public and stakeholder engagement. A glossary of technical terms used is included at the end of the document.

Overview of Irish Water

Irish Water was established as a subsidiary of the Ervia Group (formerly Bord Gáis Éireann). Ervia now has responsibility for the delivery of gas and water infrastructure and services in Ireland. Establishing Irish Water involved the creation of the required organisation, management systems and processes to manage the water services assets estimated to have a value of €11 Billion, drawing on the experience and expertise of Bord Gáis Éireann, as a modern efficient and customer focused energy utility.

Incorporated in July, 2013, Irish Water brings the water and wastewater services of the 34 local authorities together under one national service provider. From the 1st January, 2014, Irish Water became responsible for all public water services, involving the supply of drinking water and the collection, treatment and disposal of wastewater.

Irish Water took on the operation of the assets through Service Level Agreements (SLAs) with all 31 local authorities (after amalgamation of the previous 34), who continue to provide day to day operations. We also took over all of the capital investment decisions and implementation of the capital programme delivery across the country.

In discharging its role as the national water services utility, responsible for water services operations and investment, Irish Water is regulated by:

- a) The economic regulator, the Commission for Energy Regulation (CER), which is charged with protecting the interests of the customer, while approving an appropriate funding requirement sufficient to enable the utility to deliver the required services to specified standards in an efficient manner; and
- b) The environmental regulator, the Environmental Protection Agency (EPA), which sets standards and enforces compliance with EU and National Regulations for drinking water supply and wastewater discharge to water bodies. The EPA liaises with the Health Services Executive in matters of public health.

Our Legal Context

Irish Water will plan, develop and operate our water service functions in line with the requirements of prevailing relevant national and European legislation. Relevant legislation includes multiple statutes, regulations and European directives. Some of the most pertinent legislation in the context of the operations covered by this plan include the Urban Waste Water Treatment Directive, the Drinking Water Directive, the Water Framework Directive, the Birds and Habitats Directives and our obligations under the Aarhus Convention in terms of European legislation and the Water Services Acts, 2007-2014, Water Supplies Act, 1942, the Planning and Development Act, 2000, European Union (Drinking Water) Regulations 2014 and Wastewater Discharge (Authorisation) Regulations 2007 in terms of national legislation.

Our Challenges

Irish Water is responsible for the delivery of water services to approximately 80% of the population. Whilst many customers receive a good quality water supply and wastewater provision, a significant proportion are dissatisfied with these services; based on quality, capacity and reliability issues. Despite the good work of local authorities over many decades, under-investment combined with a lack of planned asset management and maintenance programmes has led to a legacy of deficiencies in our treatment plants and networks. In many areas, limitations on treatment and/or network capacity urgently need to be addressed to accommodate new housing, commercial and industrial developments.

In our two largest cities of Dublin and Cork, we continue to rely for part of the daily drinking water requirement on 19th century systems which are no longer fit for purpose in their current condition. This exposes these supplies to an unacceptable risk of failure. Outside of our major urban centres, our water supply network is fragmented with many small and vulnerable water sources. Water quality does not meet European and Irish drinking water standards in many of our schemes and up to 30% of water treatment plants are considered to be “at risk” of failure in terms of quality parameters. In 2014, an estimated 23,000 customers had a Boil Water Notice, indicating that their water was not fit for drinking due to the risk of microbiological contamination. One hundred and twenty six (126) water supply zones are on the EPA’s Remedial Action List (see Appendix 1 for a list of water supply zones on the EPA RAL in Q3 2014), requiring investment and/or significant improvement in operation to reduce the risk of failure to accepted levels. We are also losing almost half of the water we produce due to leakage within our water mains and within customer properties.

Wastewater must be collected and treated before it is returned to the environment. The most recent EPA assessment of urban wastewater¹ identifies that wastewater treatment is not at the required standard in 38 of our larger urban areas and that 44 areas discharge raw sewage (sewage that is untreated or has had preliminary treatment only) (see Appendix 2 for list of these areas). As a result of Ireland’s failure to meet the requirements of the EU Urban Waste Water Treatment Directive in respect of 71 agglomerations/areas in 2011 (see Appendix 3 for the list of the 71 non-compliant agglomerations) the European Commission has initiated an Infringement Case against the state. Many of our sewers in urban areas receive rainfall run-off from roads and hard surfaces in addition to wastewater. These combined sewers are frequently overloaded during periods of heavy rain resulting in the flooding of some properties and giving rise to overflows which can cause pollution within our rivers and streams.

Apart from these compliance challenges, the welcome return of economic growth brings a requirement for additional capacity to support housing development, together with offices, factories and commercial buildings supporting jobs. There are areas zoned for development which are currently constrained by limitations in system capacity for water and wastewater. This additional demand must be met without risk to existing customer service standards. Key national policy objectives for employment and increasing housing output (Construction 2020²) must be provided for. The Housing Supply Co-ordination Task Force for Dublin (established by the DECLG as an action under Construction 2020) identifies water services infrastructure deficit among the constraints to be overcome if housing needs are to be met in the Greater Dublin Area.

Substantial improvements to water supply capacity, quality and reliability are required in addition to upgrading of our wastewater infrastructure, both treatment plants and collection networks, in order to protect the environment. This will require significant capital investment over many years. Even with additional funding, the timescale to address all of the issues is likely to extend through a number of investment cycles so that we must prioritise projects which should proceed in order of criticality.

What is the Water Services Strategic Plan?

This Water Services Strategic Plan (WSSP) sets out strategic objectives for the delivery of water services over the next 25 years up to 2040. It details current and future challenges which affect the provision of water services and identifies the priorities to be tackled in the short and medium term. In developing the plan, we have considered its interaction with other national and regional strategic plans such as the National Spatial Strategy and River Basin Management Plans. This plan (Tier 1) also provides the context for subsequent detailed implementation plans (Tier 2) which will document the approach to be used for key water service areas such as water resource management, wastewater compliance and sludge management.

¹ Focus on urban wastewater treatment in 2013. Published by the EPA, December 2014.

² Construction 2020, A strategy for a renewed construction sector; May 2014; Government Publication; 2014

The WSSP will be reviewed on at least a five yearly basis to ensure that it continues to be up to date with current and future needs. An interim review is also planned to ensure consistency with the new National Planning Framework, the new Regional Spatial and Economic Strategies and River Basin Management Plans which will be developed in the next few years.

In addition, Irish Water will prepare Business Plans during the period setting out targets for delivery of efficiencies in operational and capital expenditure and performance targets consistent with the delivery of the objectives in this WSSP. In accordance with the Service Level Agreements with the now 31 Local Authorities, a series of transformation initiatives are being implemented in partnership with the local authorities. The most important of these will be the development of the Water Industry Operating Framework to facilitate the delivery of water services under the single utility model.

The Water Services (No. 2) Act, 2013 provides for Ministerial Direction on the form and content of this WSSP and the Minister has set out the requirement for the plan to address the delivery of six strategic objectives as follows:

- **Meet Customer Expectations;**
- **Ensure a Safe and Reliable Water Supply;**
- **Provide Effective Management of Wastewater;**
- **Protect and Enhance the Environment;**
- **Support Social and Economic Growth; and**
- **Invest in Our Future.**

These are not in a particular order of priority. For each strategic objective within the plan, we outline the current situation, identify the key challenges and propose a number of aims and strategies to address the objective. We have suggested targets within the plan in order that our performance against the objectives can be monitored and assessed by our regulators, other stakeholders and our customers. It should be noted that a number of strategies are cross cutting between strategic objectives. For example, strategies for achieving effective wastewater management will also result in protecting the water environment.

An initial public consultation on the issues to be included in the plan was completed in the summer of 2014 and has informed this document. The plan has been subjected to Strategic Environmental Assessment and Appropriate Assessment and these documents are also published and are available at <http://www.water.ie>.

Our Current Priorities

In this first strategic plan, we need to address urgent issues in the quality of our water services and in the integrity of our infrastructure, subject to adequate funding being available to us, while ensuring that water services that currently meet required standards continue to do so. We have therefore prioritised the following six areas:

- Demonstrating our commitment to the delivery of an improved quality water and wastewater service through the appropriate management of our assets in an economic and efficient manner ensuring least cost for our customers.
- Remediating the drinking water quality problems where customers have a Boil Water Notice or water supplies fail other mandatory requirements of the Drinking Water Regulations. We are also prioritising high risk plants identified in the EPA Remedial Action List.
- Complying with the Urban Waste Water Treatment Directive and, in particular, addressing the lack of wastewater treatment at 44 urban centres and improving treatment at the 38 larger urban areas which do not currently meet the required treatment standards. We are also prioritising upgrades at sites of serious pollution including sites resulting in adverse impacts on Bathing Waters.
- Reducing the excessive leakage from our water mains through our water conservation programmes. Completion of the domestic metering programme in line with Government policy will create customer awareness of their water usage and support behavioural changes in water consumption. It will identify the location of customer side leaks which can be addressed through our "first fix policy". In addition, the programme is adding to our knowledge of where lead service connection and supply pipes are located.
- Capturing accurate information on the nature, condition and performance of all of our assets (infrastructure and equipment) into quality assured databases, especially critical assets whose failure would have significant customer impacts, in order that we can better target investment in asset maintenance/upgrades.
- Catering for future growth.

Our Strategic Objectives

Our six strategic objectives are highlighted in the following sections.

Objective: Meet Customer Expectations

Our aim under this objective is to **establish both customer trust and a reputation for excellent service** through delivering our set of defined strategies; thereby, building the trust and confidence of our customers.

We recognise the need for the provision of high quality, reliable water services, delivered through resilient systems in an efficient and economic manner. Our first response to ensuring delivery in an efficient and economic manner has been to review all proposed capital investment in the water services assets to more accurately define the scope required and confirm value for money. However, even with savings identified by re-scoping and introduction of new technologies, the level of investment required remains significant and we must prioritise the required projects against the available funding.

Our economic regulator, the CER, has set out the levels of service which we are required to meet in the Customer Handbook and this is supplemented by a number of Codes of Practice which we have published. These relate to how we will correspond with our customers, deal with requirements for billing, complaints and other matters.

We will communicate with our customers, particularly when we must temporarily interrupt services, giving advance notice in accordance with our regulatory requirements. When we have unplanned interruptions, for example as a result of burst mains or other emergency works, we will use the appropriate national, regional and local media as well as social media and mobile notifications and have a commitment to directly contact vulnerable customers.

We will fully support the work of the Public Water Forum to be established under the Water Services Act, 2014, with respect to their comments and suggestion in relation to the performance by Irish Water of its functions.



Key targets in relation to meeting customer expectations by the end of 2021, 2027 and 2040 include;

Customer Contact Handling – maintain the number of customer calls answered within 20 seconds at the current baseline of 80% and less than 5% of calls abandoned in line best practice in utilities in Ireland and the UK.

Customer Complaint Handling – increase the percentage of customer complaints resolved (or steps taken towards resolving the complaint) within 5 working days of receiving the complaint from current baseline of 90% to 100% by the end of 2021 and maintain this rate.

Note: for all targets identified in relation to this objective – see Indicators and Targets under this Objective in the main body of the document.

Objective: Ensure a Safe and Reliable Water Supply

Our aims under this objective are to:

- Manage the sustainability and quality of drinking water from source to tap to protect human health.
- Manage the availability, sustainability and reliability of water supply now and into the future.
- Manage water supplies in an efficient and economic manner.



Safe and reliable water supplies are essential to public health, social and economic growth. Irish Water currently operates around 900 water treatment plants. Water quality from some of these water treatment plants does not meet the current Drinking Water Quality Regulations due to microbiological contamination or exceedances of other water quality parameters. Many of these treatment plants take their water from small water sources which are vulnerable to contamination and the impacts of climate change. The water supply distribution networks operate as isolated systems which are not interconnected. We also estimate that, nationally, we are losing approximately 49% of the water we treat due to leakage from our water mains and within customers' properties. Some of our older water mains and our customers' service pipes are made from lead which can in itself contribute to contamination of water by dissolving into the water, particularly at times of no or low flow.

We have identified a set of actions to address the above challenges which include to:

- Prepare and implement a **National Water Resources Plan** for the strategic development of water supplies that comply with the water quality standards and build in security of supply through the interconnection, where practicable, of our current water supply networks and the development of new, larger and more secure water sources serving regional schemes.
- Prepare and implement **Drinking Water Safety Plans** to protect our water supplies in accordance with international best practice, eliminating Boil Water Notices other than from short term extreme events.
- Implement a **Lead in Drinking Water Mitigation Plan** to reduce the potential for water to dissolve lead from pipework and to replace our public lead water mains over a ten year period.
- Implement a national set of **Standard Operating Procedures** in our water treatment plants and networks to ensure their correct, efficient and safe operation.
- Manage all our **water abstractions** to minimise their impact on the environment.
- Implement **regional water conservation strategies** to reduce leakage from our water mains by over 50% in the period of the WSSP.
- Adopt an **asset management approach** to maintenance and investment in our infrastructure and equipment so that we maximise the lifespan of our assets for consistent levels of service at least cost, utilising the capabilities and systems established in Irish Water.

Key targets in relation to ensuring a safe and reliable water supply by the end of 2021, 2027 and 2040 include;

Drinking Water Microbiological Standards – increase the percentage of samples complying with water quality standards from the current baseline of 99.82% to 99.99% by the end of 2021 and maintain that compliance rate.

Leakage of Treated Water – reduce the current leakage rate of approximately 49% to less than 38% by the end of 2021, to 30% by 2027 and to an economic level of leakage by 2040.

Note; for all targets identified in relation to this objective – see Indicators and Targets under this Objective in the main body of the document.

Objective: Provide Effective Management of Wastewater

Our aims under this objective are to:

- Manage the operation of wastewater facilities in a manner that protects environmental quality.
- Manage the availability and resilience of wastewater services now and into the future.
- Manage wastewater in an efficient and economic manner.

Wastewater must be collected and treated to an acceptable standard before it is discharged back into the environment. As a minimum, discharges from our wastewater networks must comply with the standards set by the EU Urban Waste Water Treatment Directive (UWWTD). A number of our treatment plants do not meet this requirement. Some of our combined sewers (pipes which receive both wastewater and the rainfall run-off from our roads and other hard surface areas) do not have the capacity to cope with heavy rainfall and this can result in flooding of properties. During intense rainfall, combined sewer overflows (CSOs) discharge effluent into our watercourses with limited or no treatment and this can result in unacceptable levels of pollution.

We have identified a number of actions to tackle these issues including to:

- Prepare and implement a **Wastewater Compliance Strategy** to improve the management of the wastewater systems. This will seek to address unacceptable discharge quality through improvements to treatment and remediate problems associated with combined sewers, where feasible.
- Prepare and implement national **Standard Operating Procedures** to ensure that all of our wastewater treatment plants and networks are operated correctly, safely and efficiently.
- Progressively meet the requirements of the **UWWTD** and the EPA Discharge Licences and Certificates.
- Identify and record properties at risk of **flooding from combined sewers** and implement measures to reduce and mitigate this risk.
- Plan and deliver measures to reduce the pollution impact from **combined sewer overflows**.
- Adopt an **asset management approach** to maintenance and capital investment, as for our water supply services, utilising the capabilities and systems established in Irish Water.

Key targets in relation to providing effective management of wastewater by the end of 2021, 2027 and 2040 include;

Compliance with UWWTD – increase the percentage of the population equivalent served by wastewater treatment plants that are compliant with the requirements of the UWWTD from the current baseline of approximately 39% to 90% by the end of 2021, to 99% by 2027 and to 100% by 2040.

Pollution Incidents caused by Irish Water's Waste Water Treatment Plants – deliver a reduction in the number of Class 2 pollution incidents (localised pollution) from a current baseline of 168 incidents to 75 incidents by the end of 2021, to 20 incidents by 2027 and maintain this level.

Note; for all targets identified in relation to this objective – see Indicators and Targets under this Objective in the main body of the document.



Objective: Protect and Enhance the Environment

Our aims to protect and enhance the environment are to:

- Ensure that Irish Water services are delivered in a sustainable manner which contributes to the protection of the environment.
- Operate our infrastructure to support the achievement of objectives under the Birds, Habitats and Water Framework Directives.
- Manage all our residual waste in a sustainable manner.

Protecting and improving the long term quality of the water environment enables safe, affordable water services as well as protecting human health and biodiversity. Many sectors have activities which impact on the water environment including emissions from industry, polluted run-off from agriculture, private household septic tanks as well as our water and wastewater services. A balance needs to be struck between our activities that impact on the water environment and the ability of the environment to sustain these impacts over both the short and longer term.

Climate change in Ireland is predicted to cause a greater frequency of extreme weather events which could result both in increased flooding risk and periods of drought. It is important to ensure that water services are adapted to the impacts of climate change in terms of;

- Adapting our assets to be resilient to climate change impacts;
- Mitigating our climate impact by reducing our carbon footprint; and
- Supporting the objectives of the National Energy Efficiency Action Plan through targeted investments and adapting asset operations.

There are a number of European Directives that give special protection to identified areas which are important for drinking water supply, nature conservation, bathing and fisheries. The Birds and Habitats Directives designate specific habitats and species for special protection and set up a network of protected sites (Natura 2000). The Water Framework Directive, which is the over-arching Directive covering management of water resources in the EU, establishes a catchment based approach to the protection, improvement and sustainable use of inland and coastal waters including groundwater. It adopts the 'polluter pays' principle and seeks to develop holistic approaches to sustainable water use. Monitoring by the EPA indicates that many of our water bodies are not at 'Good Status' and discharges from wastewater treatment plants are one of the causes of this.

Water and wastewater treatment generates sludge products which require disposal or re-use where feasible. Wastewater sludge can be treated for re-use as a fertilizer and soil conditioner and also to generate renewable energy. We aim to retain and develop these outlets with full regard to all food safety and environmental considerations through quality management of all stages of the process.

We have identified a number of actions to achieve our environmental and sustainability aims including to:

- Implement a **Sustainability Policy and Framework**.
- Prepare and implement a **Sustainable Energy Strategy**.
- Prepare and implement a **Climate Change Adaptation and Mitigation Strategy**.
- Adopt a **green procurement approach** and review our current use of resources.
- Contribute to the delivery of the **Water Framework Directive** programmes of measures and our obligations under the Birds and Habitats Directives.
- Develop and implement **waste and sludge management plans**.

Key targets in relation to protecting and enhancing the environment to the end of 2021, 2027 and 2040 respectively include;

Energy Efficiency – improve the energy efficiency at Irish Water facilities over the 2009 baseline by 33% by 2020 (national policy target) and meet the targets that will be established by national energy policy to 2040.

Facilitate the achievement of water body objectives under the Water Framework Directive and our obligations under the Birds and Habitats Directives – achieve the key targets identified under the Provide Effective Management of Wastewater objective with respect to wastewater treatment and effluent discharges from Irish Water's facilities and under Ensure a Safe and Reliable Water Supply with respect to ensuring our abstractions for drinking water are environmentally sustainable.

Note: for all targets identified in relation to this objective – see Indicators and Targets under this Objective in the main body of the document.

Objective: Support Social and Economic Growth

Our aims under this objective are to:

- Support national, regional and local economic and spatial planning policy.
- Facilitate growth in line with national and regional economic and spatial planning policy.
- Ensure that water services are provided in a timely and cost effective manner.

The Central Statistics Office has published population growth forecasts at a national scale to 2046 and at a regional scale to 2031 based on the results of the 2011 census. These projections indicate that the national population will grow from 4.5 million in 2011 to between 5 million and 6.7 million by 2046, depending on the growth scenario used. Growth will vary across regions, with the Dublin/Mid East region likely to experience the greatest growth and the Western and Border Regions likely to experience the least growth.

The delivery of appropriate infrastructure to meet the required demand, where and when it is needed, supports the social and economic growth of the country. Reliable, high quality water supplies are increasingly important to attract foreign direct investment into Ireland. To achieve these objectives we must assess the demands for water services, based on national and regional spatial planning policies and plans, together with population and economic growth predictions. Our plans must ensure continuous service to all Irish Water's existing customers, whilst providing additional capacity to meet future population growth and industrial development. The objectives of the Government's strategic approach to housing identified in Construction 2020 must be provided for in terms of both treatment and network capacity.

However, there are a number of challenges in meeting this objective including the accurate prediction of the growth of the domestic population and changing demography. The demand from businesses and industry is uncertain and industrial development can have significant "one-off" demands for large water and/or wastewater capacity. This requires that our plans and implementation programmes are versatile and capable of being phased as far as possible to meet emerging needs.

To meet this strategic objective we will, in summary:

- Work with national, regional and local planning bodies to ensure that we understand and **plan for future development consistent with national, regional and local planning policy.**
- **Maximise the capacity of our existing assets** through effective management.
- **Invest in interconnection of networks and additional capacity** and ensure that we **maintain appropriate headroom** (spare capacity above demand) to cater for production risk and provide flexibility in capacity to meet new demands.
- **Balance investment for growth in demand with other priorities** to ensure best outcome for customers.
- Operate an equitable **new connections charging policy** for new customers.

A key target in relation to supporting social and economic growth to the end of 2021, 2027 and 2040 respectively includes;

The availability of capacity, "Headroom", at water and wastewater treatment plants to meet "core strategies" identified in development plans. The percentage of treatment plants meeting the target capacity headroom to increase from a current baseline of "unknown" to 60% of plants meeting their target by the end of 2021, 75% by 2027 and 100% of plants meeting their target by 2040.

Note; for all targets identified in relation to this objective – see Indicators and Targets under this Objective in the main body of the document.

Objective: Invest in Our Future

Our aims under this objective are to:

- **Manage our assets and investments in accordance with best practice asset management principles to deliver a high quality, secure and sustainable service at lowest cost.**
- **Invest in our assets while maintaining a sustainable balance between meeting customer standards, protecting the environment and supporting the economic development and growth of the country.**
- **Establish a sustainable funding model to ensure that Irish Water can deliver the required capital investment in order to achieve the required outcomes.**
- **Promote research and utilise proven, innovative technical solutions to meet standards set by our regulators including our objectives for cost and energy efficiency.**

The historic under-investment in our water and wastewater networks and treatment facilities means that we now need to secure significantly increased levels of funding (approximately €600M capital investment each year) in order to achieve adequate standards of drinking water and wastewater compliance and to support the growth of the country. Because of the very high levels of investment required and also the significant constraints on Government borrowing, the Irish Water funding model must enable us to raise finance from other sources.

In order for Irish Water to be able to raise significant finance at favourable interest rates, it will be necessary for it to demonstrate that it is an efficient water utility company, operating within a stable regulatory framework, with secure revenue streams.

We need to achieve a sustainable balance between the level of investment meeting customer standard, protecting the environment and supporting the social and economic development of the country through working with our regulators and stakeholders. This will require that we operate efficient systems and processes in both operations and capital delivery.

Our actions for achieving this strategic objective are to:

- Overcome the deficit in **knowledge of our current asset base** through the development of accurate databases linked to Geographical Information Systems and installing modern asset monitoring and reporting systems to support automation and process control.
- Maintain our infrastructure and plan for its replacement through adopting an **asset management approach** in line with international best practice.
- Develop a **sustainable funding model**. Irish Water is taking a 25 year perspective in relation to investment in water services.
- Engage collaboratively with our customers, stakeholders and regulators to deliver optimum investment outcomes at least cost using **clear and transparent investment criteria**.
- Raise **public and stakeholder awareness** of the value of water services and the requirements to deliver them to the required standards.
- Engage with organisations conducting **research and development** in water services, including Irish third level colleges and institutes, and use proven innovation to maximise benefits for our customers and the environment.

A key target in relation to investing in our future to the end of 2021, 2027 and 2040 respectively includes;

Operational and capital efficiency – meet 100% of the requirements identified by the CER with respect to operational and capital efficiency by end of 2021 and maintain this percentage.

Note; for all targets identified in relation to this objective – see Indicators and Targets under this Objective in the main body of the document.

Summary of Strategic Objectives and Aims

A table summarising our strategic objectives and aims is presented below.

CE	Meet Customer Expectations
CE1	Establish both Customer Trust and a Reputation for Excellent Service.
WS	Ensure a Safe and Reliable Water Supply
WS1	Manage the sustainability and quality of drinking water from source to tap to protect human health.
WS2	Manage the availability, sustainability and reliability of water supply now and into the future.
WS3	Manage water supplies in an efficient and economic manner.
WW	Provide Effective Management of Wastewater
WW1	Manage the operation of wastewater facilities in a manner that protects environmental quality.
WW2	Manage the availability and resilience of wastewater services now and into the future.
WW3	Manage wastewater services in an efficient and economic manner.
EN	Protect and Enhance the Environment
EN1	Ensure that Irish Water services are delivered in a sustainable manner which contributes to the protection of the environment.
EN2	Operate our water services infrastructure to support the achievement of water body objectives under the Water Framework Directive and our obligations under the Birds and Habitats Directives.
EN3	Manage all our residual waste in a sustainable manner.
SG	Support Social and Economic Growth
SG1	Support national, regional and local economic and spatial planning policy.
SG2	Facilitate growth in line with national and regional economic and spatial planning policy.
SG3	Ensure that water services are provided in a timely and cost effective manner.
IF	Invest in Our Future
IF1	Asset Management. Manage our assets and investments in accordance with best practice asset management principles to deliver a high quality secure and sustainable service at lowest cost.
IF2	Balanced Sustainable Investment. Invest in our assets while maintaining a sustainable balance between meeting customer standards, protecting the environment and supporting the economic development and growth of the country.
IF3	Sustainable Funding Model. Establish a sustainable funding model to ensure that Irish Water can deliver the required capital investment in order to achieve the required outcomes.
IF4	Research and Innovation. Promote research and develop proven, innovative technical solutions to meet standards set by our regulators including our objectives for cost and energy efficiency.

Environmental Assessment, Consultation and Adoption of this Plan

A Strategic Environmental Assessment (SEA) and Appropriate Assessment (AA) were undertaken by Irish Water during the preparation of this Water Services Strategic Plan. A draft Plan, SEA Environmental Report and Natura Impact Statement (NIS) were published for consultation with statutory and non-statutory consultees and the general public from the 19th February to the 17th April 2015. We have taken on board the feedback we have received through the consultation process in the preparation of this final Plan. The changes made to the draft Plan due to this feedback are identified in the SEA Statement for the Plan. The Water Services Strategic Plan was adopted by the Irish Water and Ervia Boards in June 2015 and was brought to the Minister for the Environment, Community and Local Government for approval in July 2015.

This document, the SEA Statement and AA Determination are available for download online at <http://www.water.ie>.



River Barrow at Srowland WTP Intake Site. Photo: Nicholas O'Dwyer

Map 1 & 2 Irish Water Water Treatment Plants & Wastewater Treatment Plants

