

# Water Supply Project

Eastern and  
Midlands Region



## Introduction

Uisce Éireann's purpose is to rise to the challenge of delivering transformative water services that enable communities to thrive.

The Water Supply Project Eastern and Midlands Region ("Water Supply Project") is a generational project and is the first major 'new source' infrastructure in the Region in the last 60 years. It will deliver a safe secure sustainable source of water supply necessary to support our growing

population and economy, including the demand for housing. It is a project that will enable us to adapt to the effects of climate change by diversifying our water supply sources.

It will provide the greater area of Dublin, Meath, Kildare and Wicklow with a resilient safe secure water and will have capacity to serve communities in Tipperary, Offaly and Westmeath along the route. It will support balanced regional development by redirecting supplies currently serving Dublin to Louth, Meath, Wicklow, Carlow and Kildare, providing regional development opportunities.

# Need for the Water Supply Project

**Currently a single source, the River Liffey, supplies 85% of the water requirements for 1.7 million people in the Greater Dublin Area (GDA) comprising Dublin, Meath, Kildare and Wicklow. In addition 67% of the water resource zones in the Eastern and Midlands Region are also in deficit and unable to provide adequate reliability to our customers.**

We abstract nearly five times more water from it than any other waterbody in the state. This dependency, along with limitations in other water supply sources in the Region, results in a serious vulnerability to risks such as prolonged drought and/or contamination.

Furthermore, implementation of a new abstraction licensing regime to comply with the Water Framework Directive, may also reduce the amount

of water which we can abstract from these water sources, in the future.

Population growth, economic growth and climate change will exacerbate the Region's water supply challenges even further. There will be an increased demand for water and put even more pressure on an already constrained water supply system. The Greater Dublin Area has already experienced water restrictions and wide-scale water outages as a result of weather events in recent years.

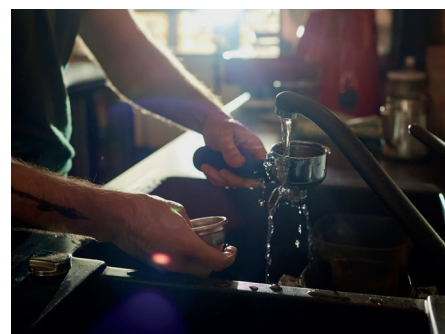
Across the wider Eastern and Midlands Region total demand is forecast to increase by approx 10% with a regional population increase of 25%. By 2044, if we do nothing the deficit across the Eastern and Midlands Region will increase considerably. This increase is driven by a number of pressures, including economic growth, climate change and the expected decommissioning of Lough Owel supply for Mullingar.

Overdependence on one source is a critical weakness in the water supply and exposure to this risk is endured daily. Action must be taken to ensure the Region's water supply can meet current and future demand.

There is also a need to provide increased resilience in the water system against loss of supply, contamination and/or pollution events and risks arising from climate change. This can only be addressed through a new water source for the Region.

Uisce Éireann is continuing to prioritise leakage reduction. We are delivering an ambitious leakage reduction programme with a target of below 20% in the Greater Dublin Area by 2030. Fixing the leaks is only part of the solution however, as it will not address the situation of a growing water supply deficit and lack of supply resilience. This is not sustainable. Even with leakage reduction, we forecast that by 2044, we will need 34% more water in the Eastern and Midlands Region than we have today.

The consequences of no new water source will be detrimental for the Region. In some parts of the Region, it may mean there will be the possibility of no new housing or commercial water supply connections for new customers by the end of the decade. In addition, existing customers will experience more frequent water supply outages and restrictions over time.



# Introducing the Water Supply Project



**The potential solutions to the water supply need in the Eastern and Midlands Region and Greater Dublin Area have been under review for over 25 years. Hundreds of options have been considered including the abstraction and desalination of water from the Irish Sea.**

Extensive and detailed appraisal of potential options has been completed, including technical, engineering, environmental, financial and economic assessments in addition to widespread public and stakeholder consultation.

The preferred solution is a new source of water supply with the capacity to address a substantial proportion of the water supply demand deficits in the Eastern and Midlands Region. The Water Supply

Project comprises abstraction of water from the lower River Shannon at Parteen Basin in Co. Tipperary, downstream of Lough Derg, with water treatment nearby at Birdhill. Treated water will then be piped 170km through counties Tipperary, Offaly and Kildare to a termination point reservoir at Peamount in County Dublin, connecting into the Greater Dublin Area water supply network.

The Water Supply Project proposes to abstract a maximum of 2% of the average flow of the River Shannon, the largest River in the country. It will, for the first time, create a water supply 'spine' across the country with the capacity for future offtakes to supply communities along the route in Tipperary, Offaly and Westmeath. The project will have the capacity to address water supply need across 36 water resource zones in the Region ensuring a sustainable supply and resilience against future shocks such as drought and climate change for up to 50% of the State's population.

**50%**

WSP has the capacity to support water supply needs of up to 50% of the population

# Benefits of the Water Supply Project

**The Water Supply Project provides a sustainable, long-term solution for water supply in the Eastern and Midlands Region which contributes to the national response to climate change.**

The project is key to the creation of an interconnected water supply network with the capacity to support population, housing and economic growth for almost 50% of the State's population in the Eastern and Midlands Region. The Water Supply Project will enable supplies of treated water currently serving Dublin to be redirected to provide a secure sustainable water supply which is capable of supporting development opportunities throughout the Region.

Based on the preliminary cost estimate of €4.58 billion, the Cost Benefit Analysis (CBA) of the Water Supply Project demonstrates that it delivers €12.25 of benefits for every €1 of costs. Sensitivity analysis carried out under the CBA also demonstrates that the project remains economically favourable at the upper range of the cost estimate. The project's expected benefits to Irish society and the people of Ireland are therefore significantly higher than its' costs and it is desirable from an overall socio-economic perspective.

## Day-to-day, the Water Supply Project will deliver:

- Additional treated water capacity in the Region.
- Increased resilience and sustainability in the water supply through diversification of sources to Louth, Meath, Kildare, Wicklow and Carlow and new water supply with capacity to serve communities along the route in Tipperary, Offaly and Westmeath.
- The Level of Service in the GDA will be increased to 1 in 50 meaning, as a consumer, you would only ever expect to experience a water supply outage or severe limitations to your water supply, on average, once every 50 years.
- Reduction in the number of properties that are affected by an unacceptable level of low water pressure.
- Greater resilience against the impact of climate change through climate adaptation and the provision of a new, sustainable source of water supply.
- Provision of water supply capacity to support population, housing and economic growth.

# Benefits of the Water Supply Project



## IMPROVED LEVELS OF SERVICE

to homes and businesses across **36 WATER RESOURCE ZONES** in the Region

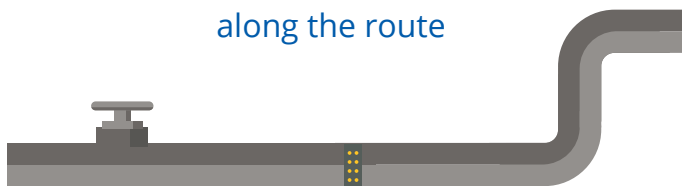
Capacity to create a **SUSTAINABLE CLIMATE CHANGE RESILIENT** water supply for up to **50% OF THE POPULATION**



Provision for offtakes to supply communities and industry in

## TIPPERARY, OFFALY AND WESTMEATH

along the route



## MEET THE WATER SUPPLY DEMANDS

of population, housing and economic growth

# Cost Benefit Analysis Confirms WSP is the Right Solution

## The Water Supply Project is a significant investment in water services infrastructure.

The cost estimate of the project is in the range of €4.58 billion to €5.96 billion. The project has been subject to a robust cost forecasting process in accordance with the principles set out in the Infrastructure Guidelines and industry best practice. This has been reviewed by AECOM and an expert review panel.

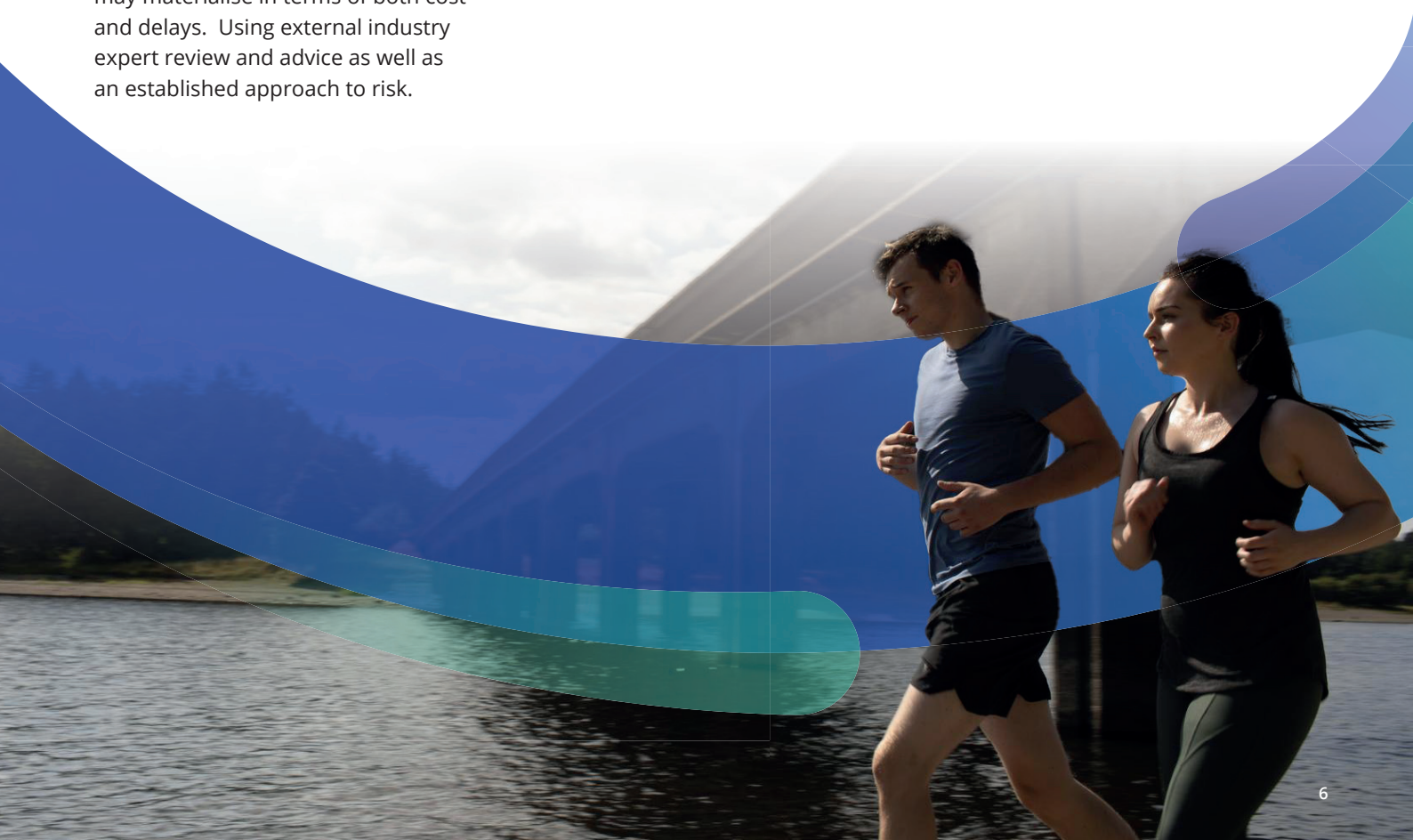
The base project cost estimate includes contingency provision that is reflective of the early stage of the development of the project and provides appropriately for risks that may materialise in terms of both cost and delays. Using external industry expert review and advice as well as an established approach to risk.

The rigorous cost benefit analysis of the project demonstrates that it delivers €12.25 of benefits for every €1 of costs and is therefore desirable from an overall socio-economic perspective.

The cost estimate will continue to be refined as the Water Supply Project progresses through the planning, detailed design and procurement stages. A firm estimate of the most likely cost of the project will only become available when a procurement process has been undertaken and tender prices received for the construction contracts.

€1 →  
€12.25

Cost Benefit Analysis show that for €1 spent on the project the return will be €12.25



# Conclusion

**The Water Supply Project Eastern and Midlands Region is a critical infrastructure project that will transform the resilience and security of water supply for the Region.**

It is supported in the National Planning Framework and National Development Plan, along with the Regional Spatial and Economic Strategy for the Eastern and Midlands Region. It is a necessary and transformational project for the State to:

- Meet the needs of our growing population including the demand for housing;
- Support economic growth and prosperity of the Region;
- Mitigate against the impacts of climate change;
- Avoid more frequent water shortages.

The Water Supply Project is a intergenerational project of major scale and significant work remains to bring it to fruition. With construction of the infrastructure anticipated to take approximately four to five years. The delivery of the Water Supply Project is critical as climate change impacts and demand for water services continues to grow.

**The successful delivery of this major national infrastructure project is critical to Ireland's social and economic growth now, and for generations to come.**

Find out more  
[water.ie/  
watersupplyproject](https://water.ie/watersupplyproject)

Connect with us  
[@IrishWater](https://twitter.com/IrishWater)

Email  
[watersupply@water.ie](mailto:watersupply@water.ie)







# Water Supply Project

Eastern and Midlands Region

