

## Water Supply Project *Eastern and Midlands Regions*

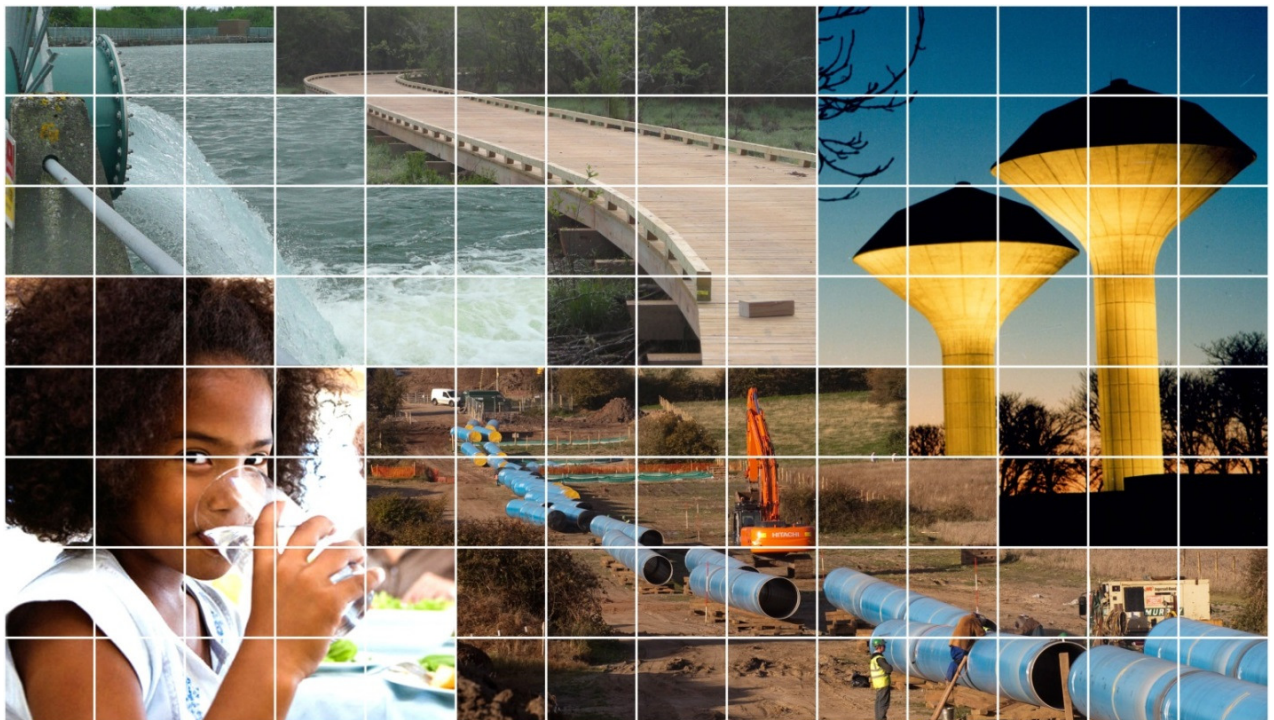
### Water Supply Options Working Paper

### Appendix E Strategic Environmental Assessment (2007-2011) Environmental Report (Phase II) Review



June 2015

Revision A01



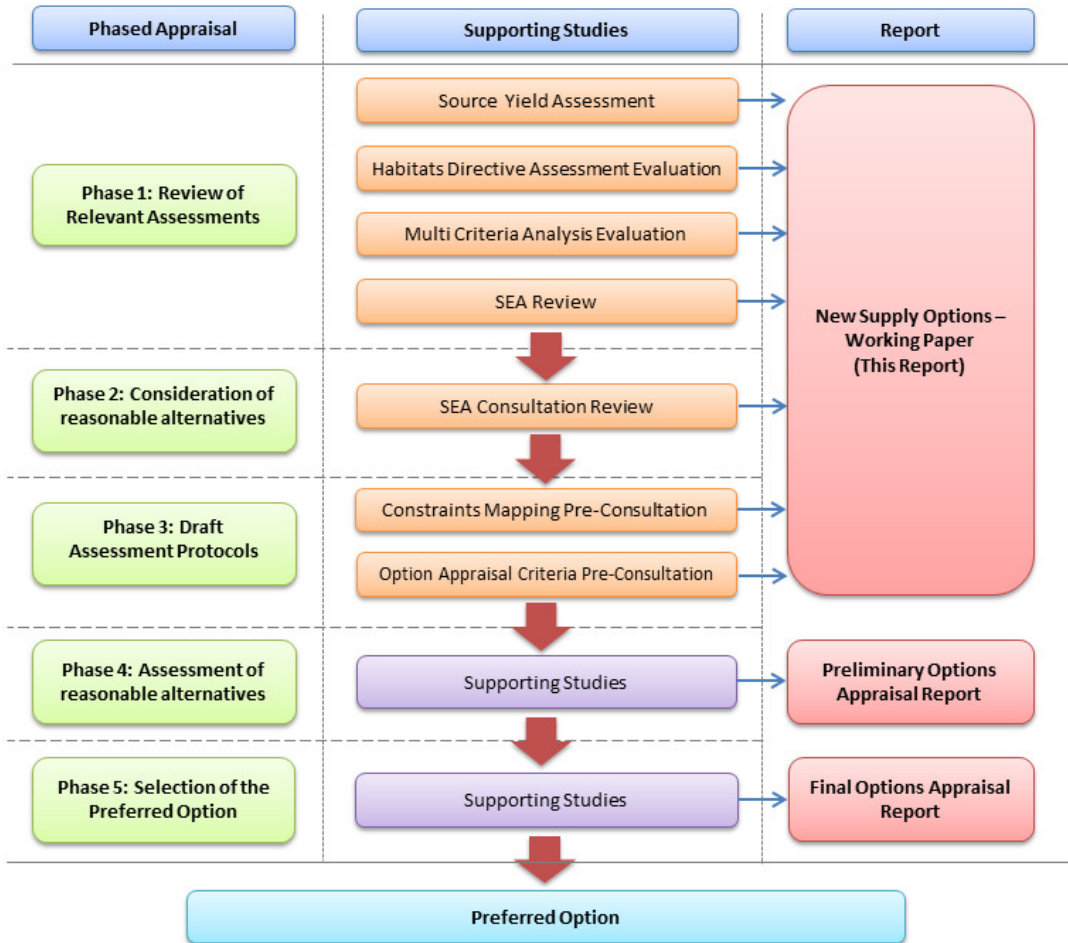
## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>Scope of Review &amp; Findings</b>	<b>2</b>
2.1	Outcome of the SEA Environmental Report (Phase II) Assessment	3
2.2	Updates to Legislation	7
2.3	County Council and Regional Planning Guidelines	10
2.4	Relevant Projects, Plans and Programmes	11
2.5	Conclusion of the SEA Environmental Report (Phase II) Review	18
	<b>Appendix E1</b>	
	<b>Appendix E2</b>	



# 1 Introduction

This report outlines the SEA Review carried out as part of Phase 1 of the option appraisal methodology.



**Figure 1-A Options Appraisal Methodology**

## 2 Scope of Review & Findings

The overall aim of the SEA Environmental Report (Phase II) was to determine the likely significant impacts on the environment due to the draft Plan.

This was undertaken by assessing the impacts of the draft Plan against a set of defined environmental objectives. The SEA objectives outlined below were selected during the SEA process as a statement of what was intended for the project with respect to the key environmental issues.

The SEA Environmental Report (Phase II) evaluated each of the original 10 options.

With specific regard to the 4 remaining options from this stage of appraisal (F2, B, C H), the SEA Environmental Report (Phase II) determined that each of these options were technically feasible (subject to further investigative studies) but with varying levels of potential environmental impact. At the time of publication, the Option F2 was found to have the least environmental impact when compared to the other options, on the evidence available at the time.

The SEA (Phase II) assessment provides the basis for the EIA/planning phase going forward. However, it is recognised that since the publication of the SEA Environmental Report (Phase II) and adoption of the Final Plan, items such as key environmental legislation, new plans, programmes and/or studies have been published or updated.

With regard for the SEA environmental objectives, a high level review was undertaken to determine whether any new information relating to legislative updates, new plans, programmes etc., could in relation to the four remaining options effect their long term aim to achieve the environmental objectives and therefore remove any of them from further consideration at this stage.

Sections 2.1 to 2.5 summarise the findings of this assessment and full assessment tables are in Appendix E1 – E2.

**Table 2-A: SEA Environmental Report (Phase II) Environmental Objectives.**

SEA Topic	Objective
Biodiversity Flora and Fauna	Avoid any Deterioration.
Biodiversity Flora and Fauna	Preserve the Integrity of fisheries.
Water	Ensure that there is no adverse impact on achieving the objectives of the WFD.
Water	Avoid adverse changes to current levels, flows and retention times.
Air and Climatic Factors	Minimise contribution to climate change.
Material Assets (including energy)	Minimise impact on energy use.
Material Assets (Landuse/ agriculture)	Minimise impact on land use including agricultural systems and forestry.
Cultural Heritage	Minimise adverse impacts on sites setting and items of cultural heritage including sites of architectural & archaeological heritage.

Landscape & Visual	Minimise adverse significant impact on landscape quality and visual amenity.
Tourism (including navigation and angling)	Minimise impact on tourism and amenity.
Population	Ensure the proposed abstractions do not detrimentally impact communities.
Population	Ensure economic growth for communities by provision of a good quality water supply.
Human Health	Maximise beneficial impact to human health by ensuring a good quality water supply.
Soils, Geology and Hydrogeology	Minimise adverse impact on soils, groundwater and geology.

## 2.1 Outcome of the SEA Environmental Report (Phase II) Assessment

As stated, the approach to the SEA assessment was an environmental objective led assessment. The options were assessed against each of the environmental objectives in terms of how it achieved that objective.

Table 2-B is taken from Table 11.1 of SEA Environmental Report (Phase II) and summarises the main assessment symbols used in the overall qualitative assessment of the environmental objectives.

**Table 2-B: SEA Assessment Symbols.**

Assessment Symbol	Description of Impact	
--	The impacts from Option on the receiving environment are likely to be severely negative	
-	The impacts from Option on the receiving environment are likely to be negative	
+	The impacts from Option on the receiving environment are likely to be positive	
∅	No change from the current baseline situation	
+/-	The impacts from Option on the receiving environment may be positive and/or negative	
?	The impacts from Option on the receiving environment are unknown	
2°	Secondary	Additional assessment descriptions – used where applicable
C	Cumulative	
Sy	Synergistic	
S	Short term	
M	Medium term	
L	Long term	
P	Permanent	
T	Temporary	

Table 2-C summaries the outcome of the SEA assessment for the four remaining options (F2, B, C, H).

**Table 2-C: SEA Assessment Outcome Summary**

SEA Topic	SEA Objective	Option B	Option C	Option F2	Option H
		SEA Assessment Outcome			
Biodiversity Flora and Fauna	Avoid any Deterioration	Negative (-) Secondary (2Ⓢ), Temporary (T), S Short term, Medium Term (M), Long term (L)	Negative (-) Short term (S) Temporary (T)	+/- Secondary (2Ⓢ), Permanent (P), Short term (S), Medium Term (M), Long term (L)	Negative (-) Short term (S) Medium Term (M), Long term (L)
Biodiversity Flora and Fauna	Preserve the Integrity of fisheries	Negative (-) Secondary (2Ⓢ), Temporary (T), S Short term, Medium Term (M), Long term (L)	Negative (-) Secondary (2Ⓢ), Temporary (T), S Short term, Medium Term (M), Long term (L)	(-/+) Secondary (2Ⓢ), Temporary (T), S Short term, Medium Term (M), Long term (L)	Change: Negative (-) Secondary (2Ⓢ), Temporary (T), S Short term, Medium Term (M), Long term (L)
Water	Ensure that there is no adverse impact on achieving the objectives of the WFD	Negative (-) Secondary (2Ⓢ)	Negative (-) Secondary (2Ⓢ)	Negative (-) Secondary (2Ⓢ)	∅
Water	Avoid adverse changes to current levels, flows and retention times	Negative (-) Permanent (P), Short term (S)	∅	Negative (-) Permanent (P), Short term (S)	∅

SEA Topic	SEA Objective	Option B	Option C	Option F2	Option H
		SEA Assessment Outcome			
Air and Climatic Factors	Minimise contribution to climate change	Negative (-) Permanent (P), Cumulative (C), Medium Term (M), Long Term (L)	Negative (-) Permanent (P), Cumulative (C), Medium Term (M), Long Term (L)	Negative (-) Permanent (P), Cumulative (C), Medium Term (M), Long Term (L)	Severely Negative (--) Permanent (P), Cumulative (C), Medium Term (M), Long Term (L)
Material Assets (including energy)	Minimise impact on energy use	Negative (-) Secondary (2Ⓢ), Permanent (P)	Negative (-) Secondary (2Ⓢ), Permanent (P)	Negative (-) Secondary (2Ⓢ), Permanent (P)	Negative (--) Secondary (2Ⓢ), Permanent (P)
Material Assets (Landuse/ agriculture)	Minimise impact on land use including agricultural systems and forestry	Negative (-), Secondary (2Ⓢ), Permanent (P)	Negative (-), Secondary (2Ⓢ), Permanent (P)	Negative and/or positive (+/-), Secondary (2Ⓢ), Permanent (P)	Negative and/or positive (+/-), Secondary (2Ⓢ), Permanent (P)
Cultural Heritage	Minimise adverse impacts on sites setting and items of cultural heritage including sites of architectural & archaeological heritage	?	?	?	?
Landscape & Visual	Minimise adverse significant impact on landscape quality and visual amenity	Negative (-), Permanent (P)	Negative (-), Permanent (P)	Negative (-), Permanent (P)	Negative (-), Permanent (P)
Tourism (including navigation and angling)	Minimise impact on tourism and amenity	∅	∅	Positive (+)	∅



SEA Topic	SEA Objective	Option B	Option C	Option F2	Option H
		SEA Assessment Outcome			
Population	Ensure the proposed abstractions do not detrimentally impact communities	Positive and/or negative (+/-) Short term (S), Temporary (T), Long term (L), Permanent (P)	Positive and/or negative (+/-) Short term (S), Temporary (T), Long term (L), Permanent (P)	Positive and/or negative (+/-) Short term (S), Temporary (T), Long term (L), Permanent (P)	Positive and/or negative (+/-) Short term (S), Temporary (T), Long term (L), Permanent (P)
Population	Ensure economic growth for communities by provision of a good quality water supply	Positive (+) Long term (L), Permanent (P)	Positive (+) Long term (L), Permanent (P)	Positive (+) Long term (L), Permanent (P)	Positive (+) Long term (L), Permanent (P)
Human Health	Maximise beneficial impact to human health by ensuring a good quality water supply	Positive (+) Permanent (P), Long term (L)	Positive (+) Permanent (P), Long term (L)	Positive (+) Long term (L), Permanent (P)	Positive (+) Long term (L), Permanent (P)
Soils, Geology and Hydrogeology	Minimise adverse impact on soils, groundwater and geology	Negative (-) Long term (L), Permanent (P)	Negative (-) Long term (L), Permanent (P)	Negative (-) Long term (L), Permanent (P)	Negative (-) Long term (L), Permanent (P)

## 2.2 Updates to Legislation

Since the SEA Environmental Report (Phase II) was published in 2008, there have been a number of updates to Irish legislation relating to protection of the environment and also with regard for the protection of water quality.

The implication of the new legislation was reviewed with respect to the SEA environmental objectives to determine whether the requirements of these legislative updates would impact the four remaining options in achieving these objectives.

Appendix E1 outlines the legislation which was reviewed and whilst the final preferred option would need to demonstrate compliance with this legislation, it was concluded that the legislative updates/introductions would not specifically remove any of the four remaining options from further consideration and assessment.

Specifically, one of the SEA environmental objectives requires “*that there is no adverse impact on achieving the objectives of the WFD*”. The EU Water Framework Directive (WFD) and the objectives of the WFD, including the final River Basin Management Plan’s (RBMP’s) were taken into account in the development of the final Plan.

As the implementation of the RBMP’s for the WFD is ongoing and with the updated RBMP’s underway and expected to be delivered in the second half of 2017, a review of the WFD core objectives was undertaken with regard to how the final preferred option would address the requirements of these objectives going forward into the EIS/planning phase of the project.

### 2.2.1 Water Framework Directive (2000/60/EC) and the River Basin Management Plans

The WFD establishes a framework for the protection of both surface and ground waters. Transposing Irish legislation outlines the water protection and water management measures required to maintain high status of waters where it exists, prevent any deterioration in existing water status and achieve at least ‘good’ status for all waters by 2015.

This is currently being achieved in Ireland through the implementation of the River Basin Management Plans (RBMPs). The core objectives of the WFD as reflected in the RBMPs are to:

- Prevent deterioration
- Restore good status
- Reduce chemical pollution
- Achieve water related protected area objectives

The RBMPs were adopted in 2010 and these plans include the programme of measures (POMs) required to facilitate the achievement of the WFD objectives.

The WFD and the objectives of the WFD influenced the development of the final Plan. Subsequent to the publication of the 2008 draft Plan and associated SEA Environmental Report (Phase II), the draft River Basin Management Plans (RBMPs) were issued for public consultation.

The final RBMPs for the Eastern and Shannon River Basin Districts were reviewed and incorporated, where appropriate into the final Plan. Hydrological and tidal models were produced when the Plan was being developed and which supported the review of the final RBMP's.

Preparation of the updated RBMP's has been delayed due to the significant reform of the water sector currently underway. This delay means that the updated RBMPs will be delivered in the second half of 2017 instead of by the originally stipulated target of December 2015. Table 2-D details the how the WSP-DR and the final preferred option will address the requirements of the objectives of the relevant RBMPs. RBMPS of relevant to the WSP-DR are the:

- Eastern RBMP
- Shannon RBMP
- South-Eastern RBMP

**Table 2-D: Core objectives of the RBMP and the WSP-DR**

Core Objectives of the WFD (reflected within the various RBMPs)	Measures to address the requirements of the objectives of the relevant RBMPs for the WSP-DR
Prevent deterioration	<ul style="list-style-type: none"> <li>As the option appraisal process progresses consideration will be given to the objectives of the RBMPs when identifying the final preferred option.</li> <li>The preferred water supply option which will be brought through to the formal planning process will undergo an Environmental Impact Assessment (EIA) and an Appropriate Assessment (AA).</li> </ul>
Restore good status	<ul style="list-style-type: none"> <li>The Environmental Impact Assessment (EIA) will be carried out in order to assess any potential impacts from the final preferred option, influence the design and propose mitigation to alleviate potential impact including those to the water environment .</li> <li>An Appropriate Assessments will be undertaken on the final preferred option in line with the requirement of the EU Habitat Directive (92/43/EEC).</li> </ul>
Reduce chemical pollution	<ul style="list-style-type: none"> <li>Both the SEA and AA reports undertaken at the WSP-DR plan stage have specified certain mitigation and monitoring measures which will be included into the scope of the EIA and AA as required.</li> <li>A WFD compliance assessment will be carried out with regard to any proposed abstraction regime in conjunction with EIA and AA with regard to current and future RBMPs.</li> </ul>
Achieve water related protected area objectives	<ul style="list-style-type: none"> <li>Hydrodynamic &amp; Water Quality Modelling will be used to assess any proposed abstraction methodology and ensure compliance with the WFD.</li> <li>Additional water quality and flow data will be collated from Lough Derg to further inform the development of future modelling works.</li> <li>The potential abstraction from inland waters will be subject to an abstraction order and the planning process which will specify the maximum allowable abstraction rate.</li> </ul>

## 2.3 County Council and Regional Planning Guidelines

The four option's abstraction points, pipeline routes and associated infrastructure could encompass the boundaries of a number of county councils. On this basis, the water supply services objectives from the County Development Plans and the Regional Planning Guidelines outlined below were reviewed to determine whether any objectives relevant to these CDP's or RPG's would affect the further consideration of the four options.

Many of the CDP's and RPG'S have been revised and updated since the publication of the SEA Environmental Report (Phase II) and final Plan. Appendix E2 summarizes the water services policies and objectives with regards to surface water abstractions, pipelines, water treatment facilities, water storage areas and water conservation measures for the following:

- Clare County Development Plan 2011-2017
- Dublin City Development Plan 2011-2017
- Dun Laoghaire-Rathdown County Development Plan 2010-2016
- Fingal Development Plan 2011-2017
- Galway County Development Plan
- Kildare County Development Plan 2011-2017
- Limerick County Development Plan 2010-2016
- North Tipperary County Development Plan 2010-2016
- Offaly County Development Plan 2009-2015
- South Dublin County Council Development Plan 2014-2020
- Westmeath County Development Plan 2014-2020
- Regional Planning Guidelines for the Greater Dublin Area 2010-2022
- Regional Planning Guidelines for the Midlands Region 2010-2022

The objectives presented in these both the CDP's and RPG's were generally found to be at a strategic level in terms of planning and development and refer to a number of water services related areas including the following:

- Adherence to legislative requirements such as the WFD and the EU Habitats Directive in the provision of the required infrastructure.
- Achieving appropriate development whilst protecting the environment.
- Maintaining current and providing for future water supply services.
- Appropriate investment in long term solutions for water supply.
- Appropriate investment in water conservation strategies.

It is considered that the objectives outlined in the CDP's and RPG's at this level would not prevent the four options from further consideration.

## 2.4 Relevant Projects, Plans and Programmes

Since the publication of the SEA Environmental Report (Phase II), there have been a number of key projects, plans and programmes published which could be considered relevant to WSP for reasons such as planning strategy, development within the same geographical area and the potential for future cumulative impacts.

A number of key projects and plans published following the SEA Environmental Report (Phase II) and the subsequent final Plan have been reviewed to determine whether any of the proposals in these plans/projects would affect the further consideration of the four options.

Table 2-E below summarises the key plans and projects which were reviewed and their potential relationship with WSP and its environmental objectives.

**Table 2-E: Review of Projects, Plans and Programmes**

Plan	Brief Description	Relation to WSP
<b>Infrastructure</b>		
<p>Grid 25 (2010 – 2025)</p> <p>Grid Link Project; Dublin North Fringe project; Laois Kilkenny Project; and East-West Interconnector Project.</p>	<p>Grid25 is EirGrid’s strategy to develop and upgrade the electricity transmission network until 2025.</p> <p>It involves extensive work throughout the country which includes building 800km of new power lines and upgrading 2,000 km of existing lines.</p> <p>Grid 25 includes a number of projects including the Grid Link Project, the Dublin North Fringe project, Laois Kilkenny project and the East-West interconnector.</p>	<p>The four remaining options for the WSP would involve development within the same geographical area as the Grid 25 projects.</p> <p>WSP would consider these projects as part of the EIS/planning phase and in the consideration of cumulative effects to assess potential impacts and propose mitigation to minimise impacts.</p>
<p>Infrastructure and Capital Investment 2012 - 2016</p>	<p>The Infrastructure and Capital Investment framework presents the findings of a Government-wide review of infrastructure and capital investment policy led by the Department of Public Expenditure and Reform.</p> <p>This review assessed the existing capacity of Ireland’s infrastructure and identifies remaining gaps which must be addressed to aid economic recovery, social cohesion and environmental sustainability.</p> <p>The framework identifies four key areas for investment including economic infrastructure, investment in the productive sector and human capital, environmental infrastructure and critical social investment.</p> <p>In the context of the WSP, the framework outlines the need to invest in environmental infrastructure including water systems and investment for environmental sustainability.</p>	<p>WSP aligns to the Infrastructure and Capital Investment Plan in that the development of this project represents an investment in water systems infrastructure.</p>

<p>The Offshore Renewable Energy Development Plan (OREDPP) 2014</p>	<p>The OREDPP is a framework for the sustainable development of Ireland's offshore renewable energy resource. It identifies potential opportunities for the development of renewable electricity.</p>	<p>The OREDPP includes all Irish sea waters.</p> <p>In the event that Option H (desalination option) was selected as the preferred option, development would be required within the water body off the coast of Fingal.</p> <p>In the event that Option H was selected as a preferred option, WSP would consider the policies and objectives outlined in the OREDPP to assess potential impacts on these, and propose mitigation to minimise impacts.</p>
<p>Greater Dublin Drainage (GDD) Project and Ringsend Wastewater Treatment Plant Tunnel</p>	<p>The Greater Dublin Drainage initiative aims to provide strategic drainage infrastructure to meet the needs of the Greater Dublin Area (GDA). The GDD project seeks to develop orbital wastewater infrastructure, a Regional Wastewater Treatment Plant (WwTP) and a sludge hub centre in North County Dublin and to discharge the treated effluent to the marine environment of the Irish Sea. Currently the project is at detailed design stage and an Environmental Impact Statement (EIS) is being prepared for submission with a planning application in 2016.</p> <p>The Ringsend Wastewater Treatment Plant currently discharge treated wastewater effluent in to the Liffey Estuary. Planning permission is currently in place to construct a 9km long sea outfall tunnel to increase the capacity of the current wastewater treatment plant. This outfall location will allow for greater dispersion and dilution of the treated effluent.</p>	<p>Given the proximity of these proposed outfalls, they would be considered in combination with any other existing discharges when considering proposed brine discharge from the Option H (desalination) in the event that it was selected as the preferred option.</p>



<b>Tourism</b>		
<p>Lough Derg Sustainable Marina, Recreational and Tourism Development Study (October 2008)</p>	<p>This document was published subsequent to the publication of the SEA Environmental Report (Phase II) and the draft Plan in 2008.</p> <p>It was commissioned by Clare, Galway and North Tipperary County Councils, and Shannon Development.</p> <p>The study is important as it outlines a shared vision between 3 local authorities and Shannon Development agency. It identifies issues and opportunities in the vicinity and the overarching vision and objective of the study is to achieve a <i>“well managed activity destination with an international reputation for its natural beauty... to retain the natural qualities of the lake and surrounding wetlands”</i>. Pg 6</p> <p>Key objectives of the study focus on marketing and visibility, tourism and activity infrastructure, recreation and special interest product development, local skills development and management for sustainability.</p>	<p>The SEA environmental objectives for WSP set the intention for tourism as to <i>“minimise impact on tourism and amenity”</i>.</p> <p>These studies would be considered with respect to Options F2, B and C because they outline information on tourism activity in the Lough Derg area and outline a vision to enhance and develop the current tourism activities in the area.</p> <p>In the event that any of Options F2, B and C were selected as the preferred option, the WSP project would consider the location of tourism facilities and amenities to assess potential impacts on these, and propose mitigation to minimise impacts on both tourism and amenity.</p>
<p>Lough Derg Life at the Lake: A Roadmap for Experience Development and Destination Marketing 2014 – 2017</p>	<p>This document was published by Lakelands and Inland Waterways. It is a strategy document that seeks to guide the development of tourism in the Lough Derg area through marketing and enabling a valued visitor experience for tourists.</p> <p>The document outlines 5 proposed key attractions;</p> <ul style="list-style-type: none"> <li>• A Discovery Point and Trailhead at the Portroe lookout;</li> <li>• A Lough Derg Canoe/Kayak trail;</li> <li>• An enhanced offering and facilities at University of Limerick Activities Centre (ULAC);</li> <li>• Portumna eco-park (masterplanning required) and;</li> <li>• Publications to promote and support active enjoyment of Lough Derg and surrounds.</li> </ul>	

Draft Tourism Policy Statement for the period to 2025	The central goal of the Draft Tourism Policy Statement is to ensure that Ireland is successfully promoted overseas and to enable Ireland’s tourism industry to have the capacity and capability to meet the changing needs of visitors.	The SEA environmental objectives for WSP set the intention for tourism as to “ <i>minimise impact on tourism and amenity</i> ”.  The WSP project would consider tourism industries and facilities to assess potential impacts on these, and propose mitigation to minimise impacts.
<b>Planning</b>		
Draft National Landscape Strategy 2014-2024	The National Landscape Strategy will be used to ensure that Ireland complies with the European Landscape Convention as ratified by Ireland in 2002.  The Strategy will also establish principles for protecting and enhancing the landscape while positively managing its change. It will provide a high-level policy framework to achieve balance between the management, planning and protection of the landscape. Some core objectives include: ‘To recognise landscape in law’; and ‘To increase landscape awareness’.	The SEA environmental objectives for WSP set the intention for landscape and visual as to “ <i>minimise adverse impact on landscape quality and visual amenity</i> ”.  Any options being considered for the WSP will require the development of both permanent and temporary structures/installations.  The WSP project would consider the landscape quality and visual amenity to assess potential impacts on these, and propose mitigation to minimise impacts.
Our Sustainable Future – a Framework for Sustainable Development for Ireland 2012 - 2020	Our Sustainable Future – a Framework for Sustainable Development for Ireland is a medium and long-term framework for advancing sustainable development and the green economy in Ireland.  The framework sets out clear measures, responsibilities and timelines in areas such as the sustainability of public finances, economic resilience, health and natural resources.	The consideration of the four remaining options for the WSP will address the development of a sustainable final preferred option that will provide sufficient water supply to the GDA.

<b>Environment</b>		
<p>Food Harvest 2020</p>	<p>Food Harvest 2020 is a strategy that was prepared by the Department of Agriculture. It sets out a range of objectives to increase the value of output in the agriculture, fisheries and forestry sector by 33% by 2020.</p> <p>The plan identifies areas of action including developing new green technologies that improve water quality.</p> <p>The plan also identifies the importance of carefully managing water in the maintenance of a sustainable agri-food and marine sector and recognises the intrinsic link between water, agriculture and climate change.</p>	<p>The implementation of the Food Harvest Strategy may lead to increased demands for water and improved protection of existing surface water and ground water sources.</p> <p>The WSP aligns with this strategy in that the project objectives are to provide a sufficient water supply to the Greater Dublin Area which would support the agricultural industry.</p>
<p>National Climate Policy Position and Climate Action &amp; Low Carbon Development Bill 2013</p>	<p>The National Climate Policy in Ireland aims to achieve transition to a competitive, low-carbon, climate-resilient and environmentally sustainable economy by 2050.</p> <p>The draft Bill states that future governments will have to draft low-carbon roadmaps for the national economy. The road maps should articulate a national vision for the transition to a low carbon, climate resilient and environmentally sustainable economy over the period to 2050. The low-carbon roadmap is to be supplemented by another plan, the national climate change adaptation framework.</p> <p>It is noted that the SEA Environmental Report (Phase II) considered the National Climate Change Strategy 2007 – 2012.</p>	<p>The final preferred option for the WSP would involve energy consumption during both the construction and operational phases</p> <p>While this legislation is in draft format, the WSP would take it and other climate change policies into consideration for the final preferred option.</p>
<p>The Irish Coastal Protection Strategy Study:</p> <p>Strategic Assessment of Coastal Flooding and Erosion Extents North East Coast - Dalkey Island to Omeath</p>	<p>The Irish Coastal Protection Strategy Study provides key baseline information on extreme water levels and coastal flood and erosion hazards.</p> <p>The knowledge of extreme water levels along the coast is a key element in the development of coastal protection strategy.</p>	<p>Important information on coastal water bodies was gathered under this study.</p> <p>The WSP would consider this study in the further consideration of Option H (desalination).</p>

<p>The National Catchment Flood Risk Assessment and Management (CFRAM) Programme</p>	<p>The National Catchment Flood Risk Assessment and Management (CFRAM) Programme commenced in Ireland in 2011.</p> <p>The programme delivers on key components of national Flood Policy and the EU Floods Directive.</p> <p>There are separate CFRAM studies for each of the river basin districts in Ireland. Important CFRAM studies relevant to the WSP are the Shannon CFRAM study, the South Eastern CFRAM study and the Eastern CFRAM study</p>	<p>The geographical area of the four remaining options for the WSP include the Shannon, South-Eastern and Eastern river basin districts.</p> <p>The WSP would consider the findings and objectives from these studies in the further consideration of the four options.</p>
--	---	---

Whilst using the SEA as the original basis of assessment for the four remaining options and having also considered the key projects, plans/programmes which have been published in the intervening period, it is considered that each of these options still merit further consideration.

## **2.5 Conclusion of the SEA Environmental Report (Phase II) Review**

As identified above, the SEA assessment provides the basis for the EIA/planning phase going forward. However, it is recognised that since the publication of the SEA Environmental Report (Phase II) and the adoption of the final Plan, key environmental legislation, new plans, programmes and/or studies have been published or updated.

The objective of the SEA Review was to address whether the 2008 SEA Phase II findings were still valid in light of the time lapse since publication and whether the four options taken through stage 1 on phase 1 of the option appraisal strategy merit further consideration with regard to identifying a final preferred option.

A high level review of key environmental legislation, CDP's, plans/programmes and projects was undertaken with respect to determining whether the new information would affect any of the four options from achieving the intentions set out in the original SEA environmental objectives. A summary of the 2014 findings is outlined in Table 2-F below.

The four options which are considered technically feasible at this stage and albeit with varying levels of environmental impact could not be discounted from being brought forward into the next phase of the option appraisal process.

The consideration of the four remaining options in the next phase will continue to take cognisance of the SEA environmental objectives for the project during the future phases of the options appraisal and assessment process.

**Table 2-F: Summary Findings SEA Environmental Report (Phase II) Review**

SEA Topic	SEA Objective	Comment Following the 2014 Review
Biodiversity Flora and Fauna	Avoid any Deterioration	Any future hydrological and tidal modelling would consider not only WFD compliance but the potential impact of water abstraction in relation to designated European sites in the vicinity.
Biodiversity Flora and Fauna	Preserve the Integrity of fisheries	<p>The EIA will be carried out in order to assess any potential impacts from the final preferred option, influence the design and propose mitigation to alleviate potential impacts.</p> <p>An AA will be undertaken on the final preferred option in line with the requirement of the EU Habitat Directive (92/43/EEC).</p>
Water	Ensure that there is no adverse impact on achieving the objectives of the WFD	<p>Any future hydrological /tidal modelling for the four remaining options would need to consider WFD compliance.</p> <p>The potential for cumulative impacts from existing discharges and proposed discharges from projects such as the GDD and Ringsend project would need to be accounted for in future modelling works.</p>
Water	Avoid adverse changes to current levels, flows and retention times	<p>The original hydrological model for the Options B, C and F2 was verified during a 2013 review.</p> <p>Any future hydrological for the Options B, C and F2 would need to consider the potential for adverse changes to current levels, flows and retentions times. These future modelling works would be informed from additional water quality and flow data which will be collated from Lough Derg.</p>

Air and Climatic Factors	Minimise contribution to climate change	Taking into account the drive towards a more sustainable economy and with future climate change in mind, the ability of the four remaining options to “ <i>minimise impact on energy use</i> ” and to “ <i>minimise contribution to climate change</i> ” would be reviewed as part of the EIA for the final preferred option.
Material Assets (including energy)	Minimise impact on energy use	
Material Assets (Landuse/ agriculture)	Minimise impact on land use including agricultural systems and forestry	The ability of the four remaining options to “ <i>minimise impact on landuse...</i> ” would be reviewed as part of the EIA for the final preferred option.
Cultural Heritage	Minimise adverse impacts on sites setting and items of cultural heritage including sites of architectural & archaeological heritage	The ability of the four remaining options to minimise archaeological/architectural and cultural heritage impacts would be reviewed as part of the EIA for the final preferred option.
Landscape & Visual	Minimise adverse significant impact on landscape quality and visual amenity	The ability of the four remaining options to minimise landscape quality and visual amenity impacts would be reviewed as part of the EIA for the final preferred option.
Tourism (including navigation and angling)	Minimise impact on tourism and amenity	There are a number of recent tourism related strategies and studies. The ability of the four remaining options to minimise tourism and amenity impacts will be reviewed in future assessments.
Population	Ensure the proposed abstractions do not detrimentally impact communities	The ability of the four remaining options and the potential impacts of any abstractions on local communities would be reviewed as part of the EIA for the final preferred option.
Population	Ensure economic growth for communities by provision of a good quality water supply	The objective of the WSP is to ensure the supply of good quality water and this will assist in economic growth. This will be considered as part of the EIA for the final preferred option.

Human Health	Maximise beneficial impact to human health by ensuring a good quality water supply	The objective of the WSP is to ensure the supply of good quality water and this will be a core consideration in the assessment of the final preferred option.
Soils, Geology and Hydrogeology	Minimise adverse impact on soils, groundwater and geology	The ability of the four remaining options to minimise soils, geological and groundwater impacts would be reviewed as part of the EIA for the final preferred option.



# Appendix E1

--



## Appendix E1

EU Directive	Irish Legislation (primary and / or secondary legislation)	Overall Purpose	Responsible Organisation / Authority in Ireland	Assessed in SEA II	Relevant SEA II Topics/ Objectives	Key Updates to European and Irish legislation since the preparation of the SEA II Environmental Report / Statement	Option B	Option C	Option F	Option H
Water Framework Directive (2000/60/EC)	European Communities (Water Policy) Regulations, 2003 (S.I. No. 722 of 2003),	To protect, enhance and restore the status of all bodies of water with the aim of achieving at least good status by 2015.	DECLG, Local Authorities, Other Public Bodies	Assessed against draft and final RBMPs	Biodiversity, Flora and Fauna, and Water,	Publication of RBMPs and PoMs  European Communities Environmental Objectives (Surface Waters) Regulations, 2009 (S.I. No. 272 of 2009)  European Communities Environmental Objectives (Groundwater) Regulations, 2010 (S.I. No. 9 of 2010)  European Communities				Any future consideration of these options would require to demonstrate compliance with the requirements and objectives of the WFD and the associated River Basin Management Plans.
The Birds Directive (79/409/EEC)	S.I. 291 of 1985 EC (Conservation of Wild Birds) and amendments	To protect all European wild birds and the habitats of listed species.	DECLG, NPWS, Local Authorities, An Bord Pleanála, All Public Authorities	Yes, an Appropriate Assessment was carried out	Biodiversity, Flora and Fauna	Directive 2009/147/EC is the codified version of Directive 79/409/EEC  SI No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011				This was assessed as part of the SEA Environmental Report Phase II as part of the Habitats Directive Assessment (Appropriate Assessment). Additionally, a supporting review in relation to Appropriate Assessment has been undertaken as part of this Options Appraisal and is provided in Appendix B.
The Bathing Water Directive (2006/7/EC) (76/160/EC repealed)	S.I. 79 of 2008 Bathing Water Quality Regulations, 2008	To safeguard public health and clean bathing waters.	Local Authorities, EPA, DECLG	Yes	Water, Human Health, Population	No				In relation to Options B, C and F2, there is no envisaged link between water abstraction from inland waters and the quality of bathing waters under this Directive.  However, in relation to discharges from Option H (desalination), brine from a desalination option in combination with any other discharges would need to demonstrate compliance to bathing water quality requirements.
The Drinking Water Directive (98/83/EC) (80/778/EEC repealed 25/12/2003)	S.I. 278 of 2007 EC (Drinking Water Regulations) (No 2)	To protect human health from adverse effects of any contamination of water intended for human consumption.	EPA, HSE, Local Authorities, DECLG	Yes	Water, Human Health, Population	European Union (Drinking Water) Regulations 2014 [SI No 122 of 2014]				Water supplied will be in compliance with the Drinking Water Directive and regulations.
The Habitats Directive (92/43/EEC)	S.I. No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011.	Habitat conservation and species protection	DECLG, NPWS, Local Authorities, An Bord Pleanála, All public authorities	Yes, an Appropriate Assessment was carried out	Biodiversity, Flora and Fauna	(Freshwater Pearl Mussel) Regulations (SI 296 of 2009) the Wildlife (Amendment) Act 2010  SI No. 477/2011 - European Communities (Birds and Natural Habitats) Regulations 2011				This was assessed as part of the SEA Environmental Report Phase II as part of the Habitats Directive Assessment (Appropriate Assessment). Additionally, a supporting review in relation to Appropriate Assessment has been undertaken as part of this Options Appraisal and is provided in Appendix B.
The Integrated Pollution Prevention Control Directive (96/61/EC)	S.I. 85 of 1994 EPA (Licensing) Regulations, 1994 & 2004	Minimise pollution from industrial sources	EPA, DECLG, Local Authorities	No	Water, Human Health, Population	The IPPC Directive was repealed with effect from 7 January 2014 by Directive 2010/75/EU on industrial emissions.				As relevant any future developments would be reviewed in relation to the requirement of these regulations .
The SEA Directive (2001/42/EC)	S.I. 435 of 2004 (European Communities (Environmental Assessment of Certain Plans and Programmes) regulations 2004 & S.I. 436 of 2004 (Planning and Development (Strategic Environmental Assessment)) Regulations	Environmental Consequences of Plans and Programmes	EPA, Local Authorities	The SEA was carried out in compliance with the 2001 Directive.	All	S.I 200 of 2011(European Communities (Environmental Assessment of Certain Plans and Programmes) (Amendment) Regulations 2011) and S.I. 201 of 2011 (Planning and Development (Strategic Environmental Assessment) (Amendment) Regulations 2011				Amendments occurred after adoption of plan and publication of SEA statement therefore process was in compliance with legislation.
Surface Water Abstraction Directive (75/440/EEC)	S.I. 294 of 1989 Quality of Surface Water intended for the Abstraction of Drinking Water	Human Health	DECLG, Local Authorities	No	Water	This directive was repealed in 2007 and regulation covering drinking water are included in the Register of Protected Areas under the Water Framework Directive.				Captured under the WFD requirements
The Floods Directive (2007/60/EC)	SI 122/2010 European Communities (Assessment and Management of Flood Risks) Regulations 2010	To reduce and manage the risks that floods pose to human health, the environment, cultural heritage and economic activity.	OPW, DECLG, Local Authorities.	Yes	Biodiversity, Flora and Fauna, Water, Human Health, Population	SI 122/2010 European Communities (Assessment and Management of Flood Risks) Regulations 2010  SI No. 470/2012 - European Union (Environmental Impact Assessment) (Flood Risk) Regulations 2012.				As relevant any future developments would be undertaken in accordance with the requirements of the this legislation.

The European Community Shellfish Waters Directive 2006/113/EC (the Directive). It supersedes the Shellfish Water Directive (79/923/EEC).	European Communities (Quality of Shellfish Waters) (Amendment) Regulation 2009, SI 55 of 2009	To protect or improve shellfish waters in order to support shellfish life and growth.	NPWS, DECLG, Local Authorities	Yes	Human Health	SI No 464 of 2009 European Communities (Quality of Shellfish Waters) (Amendment)(No 2) Regulations 2009 and SI No 55 of 2009 European Communities (Quality of Shellfish Waters) (Amendment) Regulations 2009	In relation to Options B, C and F2, there is no envisaged link between water abstraction from inland waters and the quality of shellfish waters under this Directive.  However, in relation to discharges from Option H (desalination), brine from a desalination option in combination with any other discharges would need to demonstrate compliance to bathing water quality requirements.
N/A	Water Services Act 2007, as amended	To consolidate existing water services legislation, to strengthen administrative arrangements for planning the delivery of water services and to place duties of care on users of water services in relation to water conservation, protection of, collection and distribution networks, and prevention of risk to public health and the environment.	Irish Water, DECLG	No	Water Metering	Water Services (Amendment) Act 2012  Water Services Act 2013 and the Water Services (No. 2) Act 2013	This project is being facilitated by Irish Water via this act.
N/A	Planning and Development Act 2000 (P&D Act 2000), as amended	To guide and manage social and economic development and protect the environment, the landscape and cultural heritage	planning authorities (local authorities and An Bord Pleanala)	The stipulations of the P&D Act were considered in the SEA II	All topics	The Planning and Development Act is evolving legislation and was amended numerous times since 2008. Some notable changes derive from the Planning and Development Amendment Act 2010. This Amendment Act clarifies the key obligations required of Planning Authorities under the Birds and habitats Directive. It also improves the throughput of An Bord Pleanala. Furthermore, it strengthens the enforcement controls of Planning Authorities.	As relevant any future developments would be undertaken in accordance with the requirements of the this legislation.
Marine Strategy Framework Directive	Marine Strategy	To protect the marine environment and achieve good environmental status in the marine environment by the year 2020.	Department of Agriculture, Marine and Food (DAMF), Department of Transport, Tourism and Sport, Department of Arts, Heritage and the Gaeltacht and the Department of Communications, Energy and Natural Resources (DCENR).	No	Water, Human Health, Population, Biodiversity, Flora & Fauna.	Transposition of the Directive into Irish legislation - S.I. No. 249 of 2011 European Communities (Marine Strategy Framework) Regulations 2011	
Environmental Impact Assessment Directive 85/337/EEC Directive 97/11/EC Directive 2003/35/EC Directive 2009/31/EC Directive 2011/92/EU (codified)	the European Communities (Environmental Impact Assessment) Regulations, 1989-2000  Planning and Development Act 2000 (P&D Act 2000), as amended	To ensure that assessments of the environmental impact of certain public and private projects are carried out before development is permitted.	planning authorities (local authorities and An Bord Pleanala)		All	Directive 2009/31/EC Directive 2011/92/EU (codified)	As relevant any future developments would be undertaken in accordance with the requirements of the this legislation.

# Appendix E2

--



Appendix E2

These CDP objectives and policies are taken directly from the CDP

County	Development Plan
Clare	<p data-bbox="491 246 1820 276"><b>Clare County Development Plan 2011 - 2017 (Chapter 8 Water Supply and Wastewater Services)</b></p> <p data-bbox="491 276 1820 335">To protect groundwater resources, in accordance with statutory requirements and specific measures as set out in the Shannon and Western River Basin Management Plans.</p> <p data-bbox="491 365 1820 424">That development that would have an unacceptable impact on the water environment, including surface water and groundwater quality and quantity, designated source protection areas, estuarine, coastal transitional waters, river corridors and associated wetlands will not be permitted.</p> <p data-bbox="491 454 1820 513">That proposals for development which infringe on a river boundary, or an associated habitat, including their connection by groundwater, will only be considered where it can be clearly demonstrated that:</p> <ul data-bbox="491 543 1820 632" style="list-style-type: none"> <li>a. The character of the area will be conserved;</li> <li>b. An acceptable physical riparian zone will be maintained with all natural vegetation preserved;</li> <li>c. There will be no impact on the ecological or aquatic or fishing potential of the waters or associated waters.</li> </ul> <p data-bbox="491 661 1820 691">To provide water and wastewater facilities in accordance with statutory obligations as set out by EU and National policy.</p> <p data-bbox="491 721 1820 750">To facilitate future development while protecting the environment.</p> <p data-bbox="491 780 1820 839">To maintain and provide adequate water supply, drainage and wastewater services in settlements to the extent that finances permit, having regard to the requirement to align water services investment with the Settlement Strategy and areas where serious deficiencies are evident.</p> <p data-bbox="491 869 1820 928">To facilitate Clare County Council's Water Services Investment Programme and Water Services Assessment of Needs to provide sufficient storage, supply and pressure of potable water to serve all lands zoned for development and in accordance with the priorities as set out in the Settlement Hierarchy.</p> <p data-bbox="491 958 1820 1018">To improve efficiency in the operation and demand management of the water supply infrastructure, promote water conservation and reduce the overall level of water loss in the public water supply.</p> <p data-bbox="491 1047 1820 1107">To introduce water supply metering to all premises and to promote and support the use of rainwater harvesting (in new buildings and as a retrofit) where viable.</p> <p data-bbox="491 1136 1820 1196">To protect all existing drinking water sources in the County and to manage development in a manner consistent with the proper management of these resources the protection of existing dependent ecosystems, peatlands and wetland habitats and in accordance with statutory requirements.</p>
Dublin City	<p data-bbox="491 1270 1820 1299"><b>Dublin City Development Plan 2011 - 2017 (Section 5.2.4.4 Water Supply &amp; Section 5.2.4.5 Natural Watercourses)</b></p> <p data-bbox="491 1299 1820 1389">In conjunction with other local authorities in the region, to implement a strategy to ensure the development of adequate drinking water systems and to provide for their expansion to meet anticipated demand and to provide long-term adequate, wholesome and clean and resilient water supplies for the city and region (see also sections 8.4.6 and 8.4.9 and Appendix 2 – Water Services Plan).</p> <p data-bbox="491 1418 1820 1478">To maximise the potential for beneficial re-use of water and to reduce leakage to the minimum possible level in the water supply system through operational leak detection measures and the watermains rehabilitation renewal programme.</p> <p data-bbox="491 1507 1820 1567">To take all necessary steps to ensure that the quality of treated water supplied to all of its customers is in compliance with the Water Quality Directives of the EU and national legislation.</p> <p data-bbox="491 1596 1820 1626">To comply with directions issued by EPA in its role as water regulator.</p> <p data-bbox="491 1656 1820 1715">To take all reasonable steps to put in place adequate strategic service storage to facilitate the efficient and effective management of the water supply system.</p> <p data-bbox="491 1745 1820 1804">To ensure that all costs associated with the provision of water and the collection of wastewater to/from non-domestic customers are recovered from those in accordance with the "polluter pays" principle.</p> <p data-bbox="491 1834 1820 1863">To promote best practice in all aspects of water supply including planning, supply, treatment, storage, transmission, distribution and conservation.</p> <p data-bbox="491 1893 1820 1923">To promote the introduction of efficient water saving fixture and fittings in all developments in compliance with the water bye-laws.</p> <p data-bbox="491 1952 1820 1982">To promote a reduction in water supply demand through a range of conservation measures including rainwater harvesting.</p> <p data-bbox="491 2012 1820 2041">To co-ordinate with the other planning authorities in the Greater Dublin Region regarding the supply of drinking water.</p> <p data-bbox="491 2071 1820 2101">To protect and safeguard the integrity of water supply facilities, installations and pipes.</p> <p data-bbox="491 2131 1820 2160">To facilitate the identification and securing of service corridors for water supply.</p> <p data-bbox="491 2190 1820 2220">To seek to initiate pilot projects encouraging homeowners to install rainwater recovery systems where feasible in conjunction with local communities.</p> <p data-bbox="491 2249 1820 2309">To promote the achievement of good ecological status, good ecological potential and good chemical status for all waterbodies in the City by 2015 in accordance with The Water Framework Directive.</p> <p data-bbox="491 2338 1820 2368">To protect the city's ground water resources in accordance with The Water Framework Directive.</p> <p data-bbox="491 2398 1820 2457">To implement the European Union Water Framework Directive through the implementation of the Eastern River Basin Management Plan and programme of measures.</p> <p data-bbox="491 2487 1820 2516">To take into consideration the Eastern River Basin Management Plan when considering new development proposals.</p>
Dun Laoghaire-Rathdown	Dún Laoghaire-Rathdown County Development Plan 2010-2016 ( Chapter 13 Environmental Infrastructure and Management)

	<p>To provide adequate high quality drinking water, to promote water conservation and to continue the development and improvement of the water supply and drainage systems throughout Dun Laoghaire-Rathdown in order to meet the anticipated water and drainage requirements of the County - all in accordance with the recommendations set out in the 'Greater Dublin Water Supply Strategic Study' and 'The Greater Dublin Strategic Drainage Study'.</p> <p>To implement Water Quality Management Plans for ground, surface, coastal and estuarine waters as part of the implementation of the EU Water Framework Directive.</p> <p>To work to deliver on key water services projects outlined in the Water Services Investment Programme - Assessment of Future Needs 2007 - 2009:</p>
<b>Fingal</b>	<b>Fingal Development Plan 2011 - 2017 (Section 4.2 Water Services)</b>
	<p>Ensure that an adequate supply of drinking water for domestic, commercial, industrial and other uses is available for the sustainable development of the County.</p> <p>Support the development of a new sustainable water source for the Greater Dublin Area.</p> <p>Contribute towards the development of a Regional Water Services Strategic Plan, as required under the Water Services Act 2007, to ensure that adequate provision of drinking water and wastewater treatment is made to meet existing and future development needs in the County.</p> <p>Continue the commitment to water conservation and leakage reduction within the Fingal area and promote awareness of water conservation measures and techniques.</p> <p>Require the use of best practice with regard to water conservation in all developments and require rain water harvesting in new developments where appropriate.</p> <p>Protect the public drinking water supply against contamination originating from a customer's system.</p> <p>Provide for ten water supply improvement schemes;</p> <ol style="list-style-type: none"> <li>1. New Water Supply Source for the Dublin Region</li> <li>2. Expansion of Leixlip Water Treatment Plant</li> <li>3. Balbriggan Water Supply Scheme</li> <li>4. Swords Watermain Rehabilitation</li> <li>5. Drinking Water Lead Service Removal Project</li> <li>6. Duplication of 36 inch watermain from Ballycoolin to Kingstown</li> <li>7. Leixlip Ballycoolin Water Supply Scheme</li> <li>8. The Ward Water Supply Scheme</li> <li>9. Swords North Water Supply Scheme</li> <li>10. Dublin Regional Water Rehabilitation Project</li> </ol>
<b>Galway</b>	<b>County development Plan (Section 7.2 Water Services)</b>
	<p>Pursue the augmentation of the Tuam Regional Water Supply Scheme and extend the public water supply network served by this scheme.</p> <p>Consider additional abstraction from the Lough Corrib to service an extended water supply network.</p> <p>Adopt the provisions of the strategic rural water plan and Implement Stage 2 of the Rural Water Strategic Plan.</p> <p>Provide and maintain quality water and wastewater services necessary for environmental purposes, and for economic, regional and rural development purposes.</p> <p>Ensure that the provision of water and sewerage facilities is undertaken in accordance with EU policies and directives and national legislation.</p> <p>Work to eliminate existing deficiencies in water supply and drainage facilities.</p> <p>Use a mixture of public and private partnerships together with funding under the Serviced Land Initiative to deliver the necessary services.</p> <p>Identify, prioritise and progress the implementation of the water investment programme.</p> <p>Develop and augment the supply of water through the Regional Water Supply networks including the interlinking of networks to ensure continuity and security of supply throughout the expanded network.</p> <p>Ensure that the water provided through the Galway Regional Water Supply Scheme meets EU Drinking Water standards.</p> <p>Introduce new Licensing requirements for Group Water Schemes in accordance with the timeframes set out in the Water Services Act 2007.</p> <p>Plan to provide services in unserved towns, villages and countryside, so that all citizens have access to high quality services.</p> <p>To promote an ecosystem approach to water and wastewater management through the integrated management of land, water and living resources, a water safety plan approach for the protection of drinking water supplies in County Galway and consideration for hydrological and natural processes, where appropriate.</p> <p>The local authority shall seek to establish 'source management and protection zones' around drinking water supply (ground and surface) sources and develop appropriate management and maintenance for same.</p> <p>Implement Water Conservation measures in the County and seek to prepare a Water Conservation Strategy for County Galway.</p>
<b>Kildare</b>	<b>Kildare County Development Plan 2011-2017 (Chapter 7 Water, Drainage and Environmental Services)</b>



	<p>To secure priorities outlined in the Water Services Investment Programme – Assessment of Needs 2010 to 2012, subject to the availability of finance.</p> <p>To ensure that all villages and settlements are provided with an adequate water supply within the limits of cost effectiveness and the availability of finance.</p> <p>To upgrade the existing water supply network infrastructure with the aim of improving the supply and quality of drinking water and reducing the level of unaccounted for water.</p> <p>To promote conservation of water resources and where possible, effect a reduction in the overall demand for treated water.</p> <p>To promote water conservation measures within the county by requiring, where appropriate, the installation of water meters in all new residential units and commercial development and in units where planning permission is required for an extension.</p> <p>To protect groundwater resources having regard to the County Kildare Groundwater Protection Scheme.</p> <p>To promote the proper management of Group Water Schemes in accordance with the Rural Water Strategic Plan.</p> <p>To have regard to the requirements of the Habitats Directive, in all proposed projects or plans.</p> <p>To co-operate with adjoining authorities and other public authorities regarding the servicing of towns bordering or in proximity to the county boundary including Enfield, Kilcock and Maynooth.</p>
Limerick	Limerick County Development Plan 2010-2016 (Section 8.3.5 Water Supply, Water Conservation and Sewerage)
	<p>It is the objective of the Council to ensure the integrity of surface water bodies is maintained; and where damaged, to seek, as resources allow, to restore their integrity. Priority will be given to those waters deemed to be sensitive in respect of their uses, and vulnerable due to low assimilation capacity. The Council shall give particular priority to the need to protect human health, designated habitats, and to minimise costs of water/wastewater treatment.</p> <p>It is the objective of the Council to match water infrastructure to development requirements in a cost-effective, sustainable and efficient manner in keeping with statutory requirements; while ensuring the pattern, form, and phasing of development that is allowed reflects service and environmental capacity. To this end the Council will monitor the cumulative effects of grants of planning permission on the available wastewater treatment capacity.</p> <p>It is the objective of the Council to ensure that Developments adjacent to water courses will be required to demonstrate that there is adequate provision for access to allow maintenance, clearance and future improvement works or emergency works.</p> <p>It is an objective of the Council to restrict development within the zone of contribution for wells used as sources of water supply, except where it is established to the Council's satisfaction that development would not interfere with the water sources of these wells.</p> <p>It is the objective of the Council to facilitate the provision and upgrading of water supply and sewerage schemes throughout the County in accordance with the settlement structure identified in this Plan and as finances permit.</p> <p>It is an objective of the Council to require that all applications for development, where public mains are available or likely to be available, that the development shall connect into them.</p> <p>It is the objective of the Council to seek to optimise the use of existing sewerage systems, and to minimise the requirement for additional sewerage pumping stations. First preference shall be given to gravity sewers. Second preference shall be given to utilising spare capacity served by existing pumping stations.</p> <p>It is the objective of the Council to secure financial contributions from developers, consistent with the Development Contribution Scheme, to support water services necessary to support existing or future developments. Bonds will also be required by the Council to ensure the satisfactory completion and maintenance of water services until the Council takes them in charge.</p> <p>It is an objective of the Council to ensure adequate cognisance is given to the following development requirements in the provision of water supplies. Developers shall ensure that:</p> <ul style="list-style-type: none"> <li>a) there is a secure and regular supply of potable water in keeping with the Drinking Waters Regulations,</li> <li>b) water has adequate pressure, and</li> <li>c) there is additional on-site storage capacity for community, commercial, or industrial needs consistent with the consumers' ability to cope with supply outage or deficit.</li> </ul> <p>It is an objective of the Council to promote the awareness of sustainable water use and to encourage water conservation and demand minimisation by</p> <ul style="list-style-type: none"> <li>a) metering and control of leaks in the Water Conservation programme;</li> <li>b) promoting Sustainable Urban Drainage Systems and grey water recycling in developments;</li> <li>c) minimising the potential for wastage through appropriate design and layout of pipe networks; and</li> <li>d) recovering costs of providing water through the use of these services in keeping with Article 9 of the EU Water Directive and the Water Services Act 2007. This is currently applied through the imposition of water charges for the non-domestic sector.</li> </ul>
Meath	

	<p>To reduce Meath County Council's dependence on the water services infrastructure of adjoining Local Authorities to cater for the projected development needs of Drogheda and Environs, East Meath and the South East urban centres.</p> <p>To implement the Water Services Investment Programme 2010 - 2013 and all subsequent Water Services Investment Programmes.</p> <p>To continue the upgrading and rehabilitation of water main networks and to implement Phases 2 to 5 of the Meath Countywide Water Conservation Project – Meath Countywide Watermains Rehabilitation Strategy.</p> <p>To continue the commitment to water conservation and reduction of leakage and wastage from the water supply systems to the lowest available level with an objective of reducing waste and leakage to less than 30% unaccounted for water during the life of this Plan in the interest of achieving efficiency and sustainability.</p> <p>To apply water pricing in accordance with water pricing policies as adopted.</p> <p>To implement the measures under the Rural Water Programme so as to improve the quality, reliability and efficiency of water supplies for rural dwellers.</p> <p>Meath County Council will seek enhanced capacity to service the East of the County and the Drogheda Environs in conjunction with Fingal and Louth County Councils, Drogheda Borough Council and the Department of Environment, Community and Local Government including where necessary the exploration of alternative options.</p>
<b>North Tipperary</b>	<b>North Tipperary County Development Plan 2010-2016 (Section 7.6 Service Provision)</b>
	<p>It is the policy of the Council that in granting permission for new development the development shall be connected to the Council water supply, and only in exceptional circumstances will the Council consider group water or single borehole wells.</p> <p>It is the policy of the Council to work with Statutory Water Authorities, where abstraction is proposed from surface or ground water supplies within North Tipperary, subject to compliance with environmental and ecological legislative requirements.</p> <p>It is the policy of the Council to endeavour to facilitate developments, by allowing the potential water resources of the County to be utilised, where possible, subject to appropriate safeguards.</p> <p>It is the policy of the Council to strive to continuously reduce water wastage and water demand in the public water supply networks to ensure sustainable management of finite resources by facilitating, encouraging and complying with best practice methods in water conservation methods throughout the County.</p>
<b>Offaly</b>	<b>Offaly County Development Plan 2009 - 2015 (Chapter 7 - Water Services)</b>
	<p>To ensure that the provision of water and wastewater treatment facilities is undertaken in accordance with EU policies and Directives, relevant National legislation and National / Regional policies.</p> <p>To enable infrastructure and service delivery in the context of the National Development Plan, subject to available finance.</p> <p>To provide and maintain adequate water supply, drainage and wastewater services in settlements as resources permit, giving priority to those centres where serious deficiencies are in evidence or where further development is anticipated. Further, it is Council policy that this be undertaken in a manner which protects and enhances the natural environment, whilst providing for economic, urban and rural development purposes.</p> <p>To ensure that the capacity of water supplies and wastewater facilities must be appropriate prior to the acceptance of a development proposal. The Council may, where it is deemed appropriate, require developers to provide water services mains with capacities in excess of those required by the development being served, if this is required in the interests of long term development of the area.</p> <p>To provide public water supply to towns, villages and rural areas in accordance with the Council's Assessment of Needs 2007-2014 and the Rural Water Plan where feasible and where approved by the Department of the Environment, Heritage and Local Government. All such supplies shall comply with Drinking Water Regulations 2007.</p> <p>The scale of provision of public water supply relates to scale of envisaged settlement size, in accordance with the county's settlement hierarchy. Therefore, large-scale availability and/or possibility of services available must not to be a pre-cursor to large-scale growth in inappropriate locations.</p> <p>To require developments to connect to public water supplies where adequate, or where proposals for upgrading works are put forward, as appropriate.</p> <p>To endeavour to facilitate developments which may have exceptionally large requirements for water by allowing the potential water resources of the River Shannon to be utilised, where possible, subject to appropriate safeguards.</p> <p>To monitor and regulate Group Water schemes in accordance with National policy and regulations.</p> <p>To continue to facilitate, encourage and comply with best practice methods in water conservation throughout the county.</p>
<b>South Dublin</b>	<b>South Dublin County Council Development Plan 2010 - 2016 (Section 2.13 - Water Supply and Drainage)</b>
	<p>It is the policy of the Council to cooperate with adjoining authorities to continue the sustainable development and improvement of the water supply and drainage systems throughout the County to meet the anticipated water and drainage requirements of the area, in accordance with the recommendations set out in the Greater Dublin Strategic Water Supply Study and the Greater Dublin Strategic Drainage Study, and the proposed Dublin Region Water Services Strategic Plan when adopted.</p> <p>It is the policy of the Council that the ongoing development of the County shall be undertaken in such a way as not to compromise the quality of surface water (and associated habitats and species) and groundwater.</p> <p>It is the policy of the Council to promote the implementation of water quality management plans for ground and surface waters in the County as part of the implementation of the EU Water Framework Directive, and in accordance with the policies and objectives and programme of measures of the Eastern River Basin Management Plan and any future amendments.</p> <p>It is the policy of the Council to protect the existing and future network of major piped infrastructural services by providing for adequate setback of development, or the promotion of best practice construction and mitigation to ensure the integrity of the existing and proposed networks and receiving environment.</p>
<b>Westmeath</b>	<b>Draft Westmeath County Development Plan 2014-2020</b>

<p>To continue the development and upgrading of the water supply system so as to ensure that an adequate, sustainable and economic supply of piped water of suitable quality is available for both domestic, and commercial /industrial use, as finances permit.</p> <p>To facilitate the implementation of the relevant provisions of Water Pollution Legislation.</p> <p>To ensure that all drinking water supplies comply with the European Union Drinking Water Directive 98/83/EC as given effect in Irish law by the European Communities (Drinking Water) (No. 2) Regulations 2007, as may be amended.</p> <p>To seek to comply with Directive 2006/7/EC on bathing water as implemented by the Bathing Water Quality Regulations 2008 (S.I. No. 79 of 2008) and in particular to ensure that bathing waters achieve "sufficient or better status by 2015" and increase the number of bathing waters classified as 'good' or 'excellent'.</p> <p>To ensure that all drinking water supplies conform with the relevant recommendations set out in The Provision and Quality of Drinking Water in Ireland: A Report for the Years 2007-2008 (EPA Office of Environment Enforcement, 2009).</p> <p>To promote water conservation measures within the county by requiring, where appropriate, the installation of water meters in all new residential units and commercial development.</p> <p>To resist development within the water catchment areas of Lough Owel and Lough Lene, which would give rise to pollution of these water sources.</p> <p>To implement the Shannon and Eastern River Basin Management Plans and their programmes of Measures, in relation to Water Policy.</p> <p>To implement the Water Services Investment Programme 2010 - 2013 and all subsequent Water Services Investment Programmes.</p> <p>To continue the commitment to water conservation and leakage reduction within the county and promote awareness of water conservation measures and techniques.</p> <p>To prepare a Water Conservation Strategy for the County.</p> <p>To apply water pricing in accordance with water pricing policies as adopted.</p> <p>To prevent deterioration of water quality by taking into account the potential of the proposed development to contribute to impact on Emission Limit Values (ELV's) and of other conditions provided for in Waste Water Discharge Authorisations (WWDA) issued by the EPA on its own or in combination with existing or permitted development.</p> <p>To prepare a detailed report within 12 months of adopting of the Plan with a particular focus on Lough Lene and Lough Owel:</p> <ul style="list-style-type: none"> <li>• Abstraction capacity limits taking account of conservation objectives of these European Sites.</li> </ul> <p>In considering development proposals, Westmeath County Council shall, in determinations prescribed under s.177V of the Planning and Development Act (2000-2012) (as amended) include, as part of its assessment required under this section, the potential for increased water abstraction should this arise as a result of such development proposals, to impact on the integrity of Lough Lene and Lough Owel European sites.</p>
--