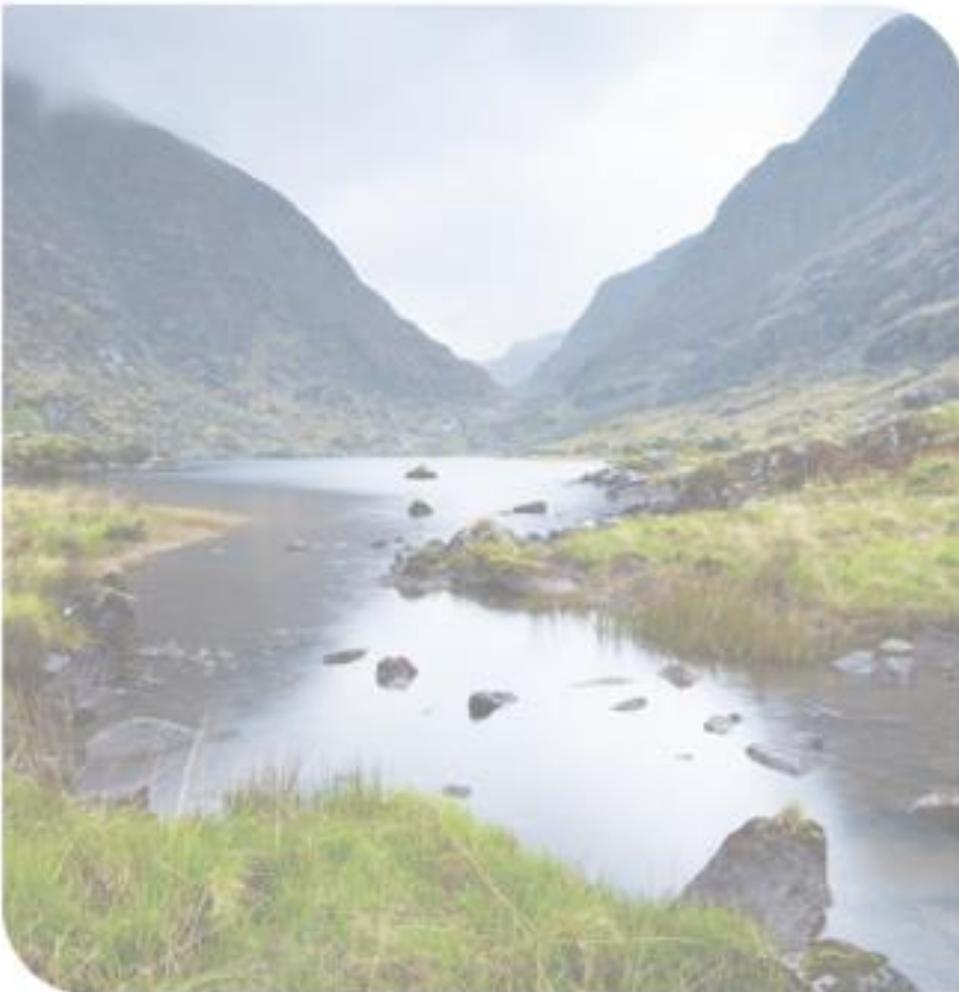


Spring 2021



National Water Resources Plan: Framework Plan

Strategic Environmental Assessment Statement



Data Disclaimer:

Data disclaimer: This document uses best available data at time of writing. Some sources may have been updated in the interim period. Irish Water is satisfied that given the scope of the Framework Plan there are no lacunae or gaps in the information required for the AA. As data relating to population forecasts and trends are based on information gathered before the Covid 19 Pandemic, monitoring and feedback will be used to capture any updates. The National Water Resources Plan will also align to relevant updates to data in applicable policy.

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1

Introduction

1 Introduction

1.1 Context

1.1.1 What is the National Water Resources Plan

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. Being able to understand and estimate how much water is required, where it is required, and the variability of requirements over the course of the year or over time, is essential to plan appropriately for the future of the public water supply.

A Water Resources Plan is a strategic plan used to identify deficiencies and need across a water supply and to develop plan level capital and operational solutions to address these issues.

Irish Water's National Water Resources Plan will be the first resources plan for the public water supply in the Republic of Ireland. It will allow Irish Water to integrate Government Policy, Legislation and external factors that have the potential to impact their water supplies into the planning and operation of their existing and future supply asset base.

The objective of the National Water Resource Plan is to manage customer and communities needs while meeting their requirements over the short, medium and long term by ensuring safe, secure, sustainable and reliable water supplies. The National Water Resources Plan will:

- Enable Irish Water to address needs across their water supplies in the most effective way over time, through the regulated investment cycles;
- Ensure that there is a transparent framework to develop the most appropriate projects/programmes to meet statutory obligations in relation to water supply; and
- Provide a framework to track outcomes, allowing interventions to be prioritised to bring the water supply up to the required standards in the shortest possible timeframe.

As a basis for broad public and stakeholder engagement, the National Water Resources Plan (the Plan) will be delivered in two phases. In this first Phase, Irish Water have consulted on the methodologies they have developed in the draft Framework Plan in order to identify need and find solutions to address need across all of their supplies. Irish Water have also assessed need across each of the 539 public water supplies nationally, in terms of:

- Water Quantity that Irish Water can provide;
- Water Quality that Irish Water can provide; and
- Performance of and operational efficiency of Irish Waters Asset Base.

Water Resources Plans are reviewed on a cyclical basis to take account of new information, data, policies and laws and are usually updated every 5 years. Irish Water know things will change over the next 25 years so within the Plan they have considered a range of possible futures, some more challenging than others. This approach is called adaptive planning, and means Irish Water are ready and flexible whatever the future holds.

1.1.2 Phase 1: National Water Resources Plan – Framework Plan

The Framework Plan (Phase 1 of the NWRP) includes:

- A description of the methodology Irish Water propose to use for Water Resources Planning;
- How Irish Water assess quantity need through the Supply Demand Balance;

- How Irish Water assess quality and reliability need through the Barrier Assessment;
- How Irish Water address Sustainability by ensuring that all new options for water supply must be based on conservative approaches to protecting water sources;
- Irish Water Options Assessment Process; and
- Irish Water Preferred Approach Development Process.
- An assessment of Need across Irish Water asset base in terms of Quality, Quantity, Reliability and Sustainability for all of their supplies nationally.

In order to manage the delivery of Phase 2, the public water supply will be divided into four regional groupings. Each regional grouping will have its own Regional Plan, which will apply the Options Assessment Methodology provided in the Framework Plan to the national water supply and develop a programme of preferred short, medium and long term solutions and/or groups of solutions to address identified needs for each area of the supply network. The Regional Plans will each be subject to a separate SEA and Appropriate Assessment (AA) process.

1.1.3 Three Pillars Approach: Lose Less, Use Less, Supply Smarter

Irish Water faces significant challenges in terms of the quantity, quality, reliability and sustainability of the public supplies across the country and must ensure that their water supplies become more sustainable over time.

In developing appropriate interventions in a sustainable manner, Irish Water have compiled the range of available solutions set out within the Framework Plan into three pillars; lose less, use less and supply smarter. This approach underpins the

Lose Less – reducing water lost through leakage and improving the efficiency of Irish Waters’ distribution networks;

Use Less – reducing water use through efficiency measures; and

Supply Smarter – improving the quality, resilience and security of Irish Water supply through infrastructure improvements, operational improvements and development of new sustainable sources of water.



Figure 1.1 Three Pillars to address the key challenges to the draft Framework Plan

Together these pillars will enable Irish Water to optimise their capital and operational interventions to achieve the best outcomes and react to emerging issues.

1.2 The SEA and Phase 1 NWRP: Framework Plan process

Table 1.1. sets the process for development of the NWRP Phases 1 and 2. This document is the SEA Statement for Framework Plan (Phase 1).

Table 1.1 NWRP phases

NWRP Phases	NWRP Reports	Content	SEA Reports
Phase 1 - Framework Plan	NWRP – draft Framework Plan	Need Identification including SDB Calculations NWRP Objectives Generic Options Types Options Assessment Methodology	SEA Environmental Report (of the draft Framework Plan)
	Case Study - Study Area	Test of the Options Assessment Methodology. Study Area 5 provided as an example with draft Framework Plan to demonstrate the methodology. The outcomes were not part of draft Framework Plan consultation.	Sample Case Study - Study Area 5 Environmental Review
	NWRP – final Framework Plan	Finalise and Adopt NWRP Framework Plan	SEA Statement (this document)
Phase 2 Regional Water Resources Plans (Regional Plans)*	Draft RWRPs (draft Regional Plans)	Application of Options Assessment Methodology and Identification of the Preferred Approach for four regions.	SEA Scoping Reports SEA Environmental Reports for the draft Regional Plans
	Final RWRPs (final Regional Plans)	Finalise and Adopt RWRP Regional Plans	SEA Statement for each Regional Plan

1.3 Purpose of this post-adoption statement

The purpose of this Post-Adoption Statement, in accordance with Article 16 of the European Communities (Environmental Assessment of Certain Plans and Programmes) Regulations 2004, is to document how environmental considerations, the views of the consultees and the recommendations of the SEA Environmental Report have been taken into account in the final Framework Plan. Therefore, this statement includes the following information in line with the Regulations:

- How the submissions and observations expressed in response to the consultation on the draft Framework Plan and the SEA Environmental Report have been taken into account (chapter 2);
- How environmental considerations and the SEA Environmental Report's recommendations have been integrated into the final Framework Plan (chapter 3);

- The reasons for choosing the final Framework Plan as adopted, in light of the other reasonable alternatives dealt with (also in chapter 3); and
- The measures that are to be taken to monitor the significant environmental effects of the implementation of the plan or programme (chapter 4).



2

How consultation responses were taken into account

2 How the SEA Environmental Report and consultation responses were taken into account

2.1 Purpose of consultation and engagement

Public consultation and stakeholder engagement is a key element in ensuring stakeholders and members of the public have an opportunity to contribute to the development of plans and projects in Ireland. Irish Water is undertaking an accessible, meaningful, and accountable consultation and engagement process with stakeholders and members of the public throughout the development of the National Water Resources Plan (NWRP).

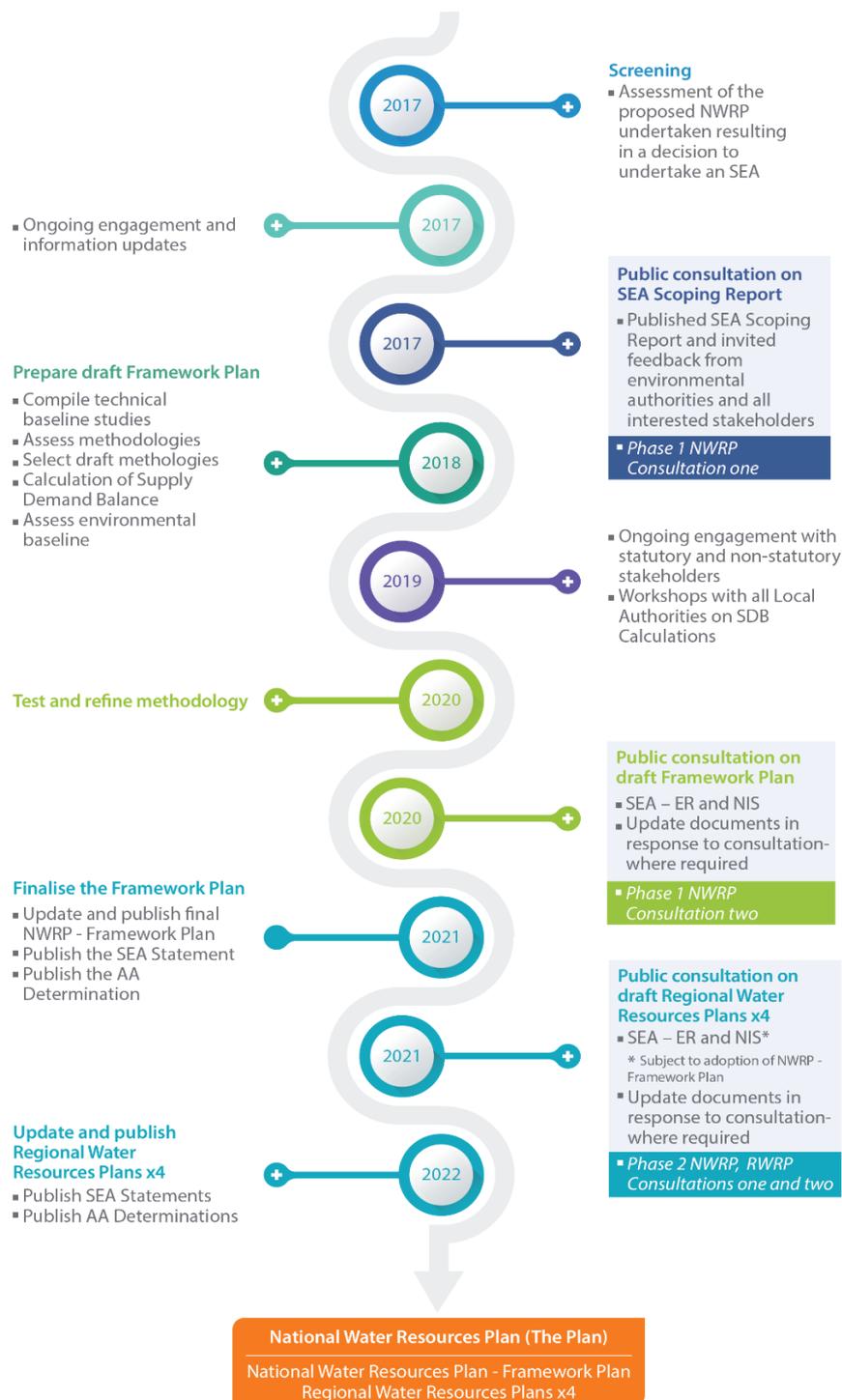


Figure 2.1 Consultation Roadmap

In October 2017, a dedicated NWRP webpage went live on the Irish Water website at www.water.ie/nwrp, introducing the NWRP and the Consultation Roadmap. The NWRP Consultation Road map, as seen in Figure 2.1, set out the process in developing the Plan and detailed the two stages where formal consultation would be undertaken in the development of the NWRP.

2.2 Pre-consultation 1 engagement

The environmental authorities EPA, Department of Agriculture, Food and the Marine (DAFM), Inland Fisheries Ireland (IFI), National Parks and Wildlife Services (NPWS), Department of Culture, Heritage and the Gaeltacht (DCHG), Department of Housing, Planning and Local Government (DHPLG), Department of Communications, Climate Action and Environment (DCCAE) were invited to attend pre-consultation workshops to present key aspects of the NWRP including methodology for selecting and assessing water supply and demand management options. The workshop gave the environmental authorities a platform to feed into the development of the NWRP and SEA.

Workshop 6th December 2017 - to present an overview of the NWRP with particular focus on the Options Assessment Methodology. The workshop was attended by the EPA and involved general discussion around the scope and content to be included in the NWRP, and feedback on the scoping questions from the scoping report in relation to the NWRP and the SEA and AA process to assist the agency in making a formal submission on the Scoping Report.

Workshop 6th June 2018 - to present an update on the NWRP and case studies on the Options Assessment Methodology. Organisations that participated in this workshop included: EPA, Inland Fisheries Ireland (IFI), Department of Culture, Heritage and the Gaeltacht (DCHG), and Department of Housing, Planning and Local Government (DHPLG).

Workshop 4th December 2018 – to present the final approach for the NWRP. This was attended by EPA and IFI and covered an update to the proposed approach for the NWRP following the experience gained from storm and drought events in 2018 as well as emphasis on improving water efficiency and leakage reduction as integral to the plan approach

2.3 Consultation one: scoping stage

The first stage of formal consultation was to inform the approach for the SEA and AA process for the NWRP. Consultation One commenced on Thursday 9 November 2017, ran for six weeks with the publication of the SEA Scoping Report (see Figure 4.1), and concluded on Friday 22 December 2017. Members of the public, interested parties and environmental authorities were invited to contribute to the development of the NWRP, as part of the SEA and AA process, through public consultation.

The Scoping Report set the geographical and temporal scope of the NWRP and SEA and aimed to inform the development of the SEA Environmental Report and AA Natura Impact Statement (NIS). The report provided an outline of the NWRP, described the environmental characteristics of the Study Area and presented the initial understanding of the key environmental issues relating to the plan.

In accordance with Article 11 of European Communities (Environmental Assessment of Certain Plans and Programmes (S.I. No. 435 of 2004) Irish Water consulted specific statutory environmental authorities on the scope and level of detail on the information to be included in the Environmental Report. The statutory environmental authorities who participated in the consultation on the Scoping Report were:

- EPA;
- Department of Housing, Planning, and Local Government;
- Department of Culture, Heritage and the Gaeltacht;
- Department of Agriculture, Food and the Marine;
- Department of Communications, Climate Action and Environment; and
- Northern Ireland Environment Agency (transboundary related).

Irish Water invited environmental authorities to briefings and workshops to further inform them on the NWRP, SEA and AA process. Meetings were held between December 2017 to December 2018, including a briefing to the Irish Water National Stakeholder Forum, Industrial Development Authority (IDA) and the Commission for the Regulation of Utilities, Water and Energy (CRU) and a presentation made to the National Water Forum (An Fóram Uisce).

Over the SEA Scoping Report consultation period (November to December 2017), submissions were received from 17 consultees including; Dublin City Council, Tipperary County Council, Limerick Chamber, DCHG, EPA, Health Service Executive, Health Service Executive Environmental Health Service, Transport Infrastructure Ireland, Geological Survey Ireland (GSI), National Water Forum, Inland Waterway Association of Ireland, Inland Fisheries Ireland, Irish Creamery Milk Suppliers Association, Indaver, Green Party, and 2 members of the public.

The feedback from workshops and briefings and the Scoping Report consultation submissions, can be grouped within the themes below:

- Projects and Development: consultees highlighted the importance of considering specific infrastructure projects and developments, including Irish Water projects;
- Environmental issues including water quality, abstractions, agriculture, energy efficiency, flood risk, climate change and aquatic biodiversity;
- Legislation: key plans, strategies and policies related to the plan were raised and requirements of the SEA Directive reinforced; and
- Economy and Social: the importance of the environment for economic and social reasons was stressed, including the importance of water for recreation and the economy and the need for Irish Water to facilitate regional growth in Ireland.

An overview of the feedback is provided in the NWRP Framework consultation one report available at www.water.ie/nwrp.

Comments received on the SEA scoping report were considered within the SEA Environmental Report (see Appendix C of the Environmental Report available at <https://www.water.ie/projects-plans/our-plans/nwrp/>

2.4 Pre-consultation two engagement

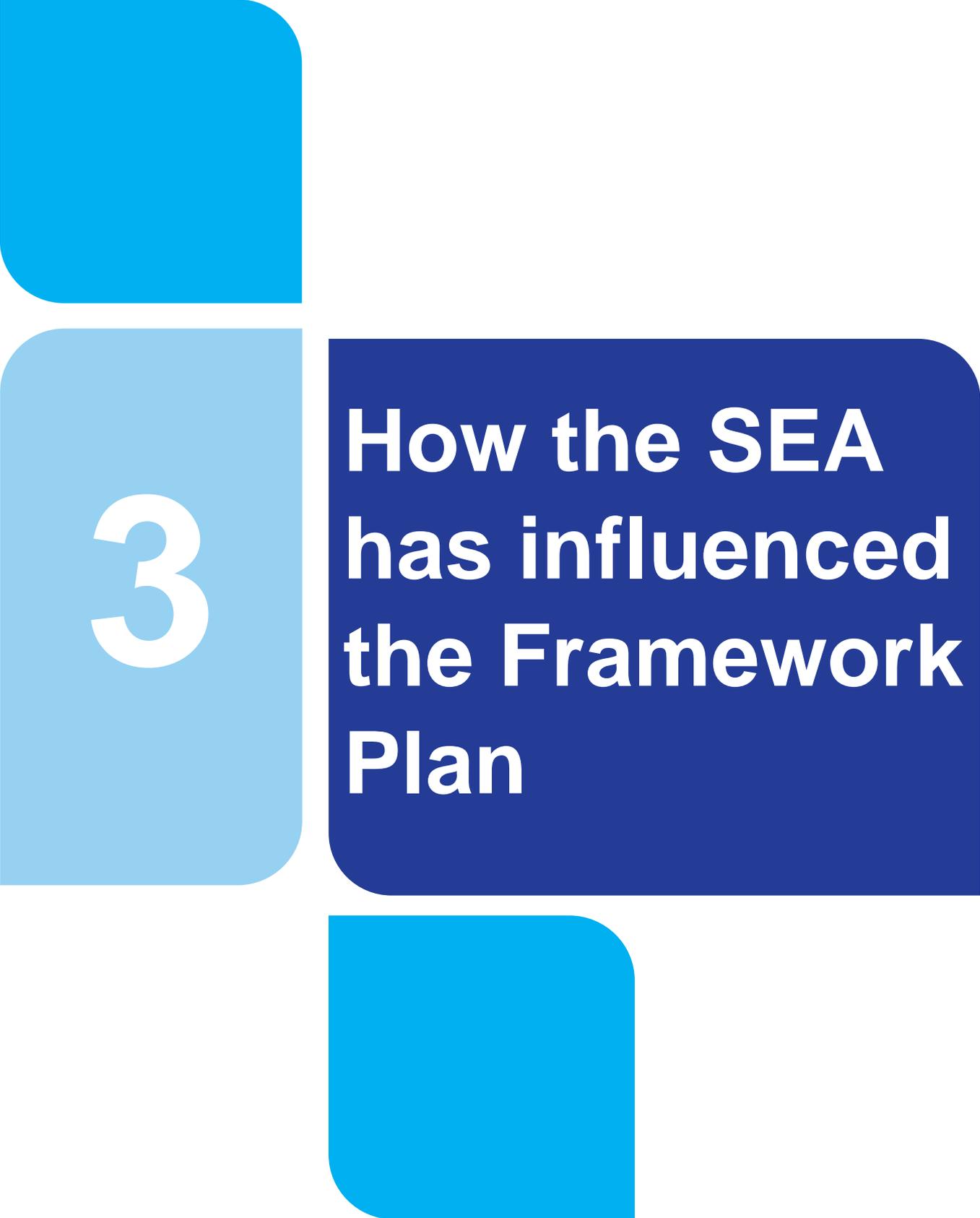
Pre-consultation 2 workshops were held in autumn 2020 with stakeholders including the Environmental Protection Agency (EPA), Inland Fisheries Ireland (IFI), National Parks and Wildlife Services (NPWS), An Fóram Uisce (National Water Forum), Northern Ireland Environment Agency, Geological Survey Ireland and Northern Irish Water amongst others.

2.5 Consultation two: Draft Framework Plan and Environmental Report

Consultation 2 (statutory 10-week public consultation) took place between 8 December 2020 until 16 February 2021. Irish Water facilitated two extensions to this statutory public consultation at the request of stakeholders, with consultation closing on 12 March 2021.

The draft Framework Plan SEA Environmental Report was published on the Irish Water website alongside the draft Framework Plan and the NIS. The Environmental Report outlined the assessment of the draft Framework Plan, including effects on the environment and proposed mitigation.

In accordance with Article 11 of European Communities (Environmental Assessment of Certain Plans and Programmes (S.I. No. 435 of 2004), SEA environmental authorities, as well as any relevant transboundary authorities (for example, Northern Ireland Environmental Agency), were notified so that they could make a submission or observation in relation to the SEA Environmental Report or the draft Framework Plan to Irish Water. Various communications tools were used in addition to this to promote the consultation and raise awareness and participation from the public and interested parties (see section 3.3 of the NWRP Consultation Two Report (Irish Water, 2021) for further details).



3

How the SEA has influenced the Framework Plan

3 How the SEA has influenced the Framework Plan

3.1 SEA process and integration with Plan development

The purpose of SEA is to enable plan-making authorities such as Irish Water to incorporate environmental considerations into decision-making at an early stage and in an integrated way throughout the plan-making process. Figure 3.1 sets out how the SEA processes have been integrated into development of the Framework Plan. The objective of the SEA process is to ensure that environmental objectives and sustainability principles are integrated into the preparation of the draft Framework Plan of the NWRP as well as providing an overall assessment of the draft Framework Plan's proposals. The approach to the SEA has aimed to:

- Contribute to the development of a preferred plan taking account of the full range of environmental protection and enhancement policy and regulatory requirements so that the plan provides a framework for meeting supply requirements while minimising environmental impacts;
- Embed principles governing sustainable abstraction, so the objectives of the RBMP and Irish Water's biodiversity obligations can be achieved
- Provide weight to the need to consider long term environmental resilience in water resource planning taking into account climate change and
- Integrate environmental protection, enhancement and sustainability objectives into the plan implementation including the options assessment methodology to be applied through the Regional Plans.

In addition to compliance with the SEA Directive, the preparation and implementation of the NWRP must meet the provisions of the Habitats Directive (92/43/EEC) and transposing legislation. The Habitats Directive requires that if a plan, policy or programme is likely to have a significant effect on one or more European sites (that is, a Special Area of Conservation (SAC) or Special Protection Area (SPA), also referred to as "Natura 2000" Network), either alone or in combination with other schemes, plans or projects, then it must be subject to AA. Figure 3.1 also shows how the development of the Framework Plan and the SEA of the Framework Plan was integrated with Stage 1 and Stage 2 of the AA process.

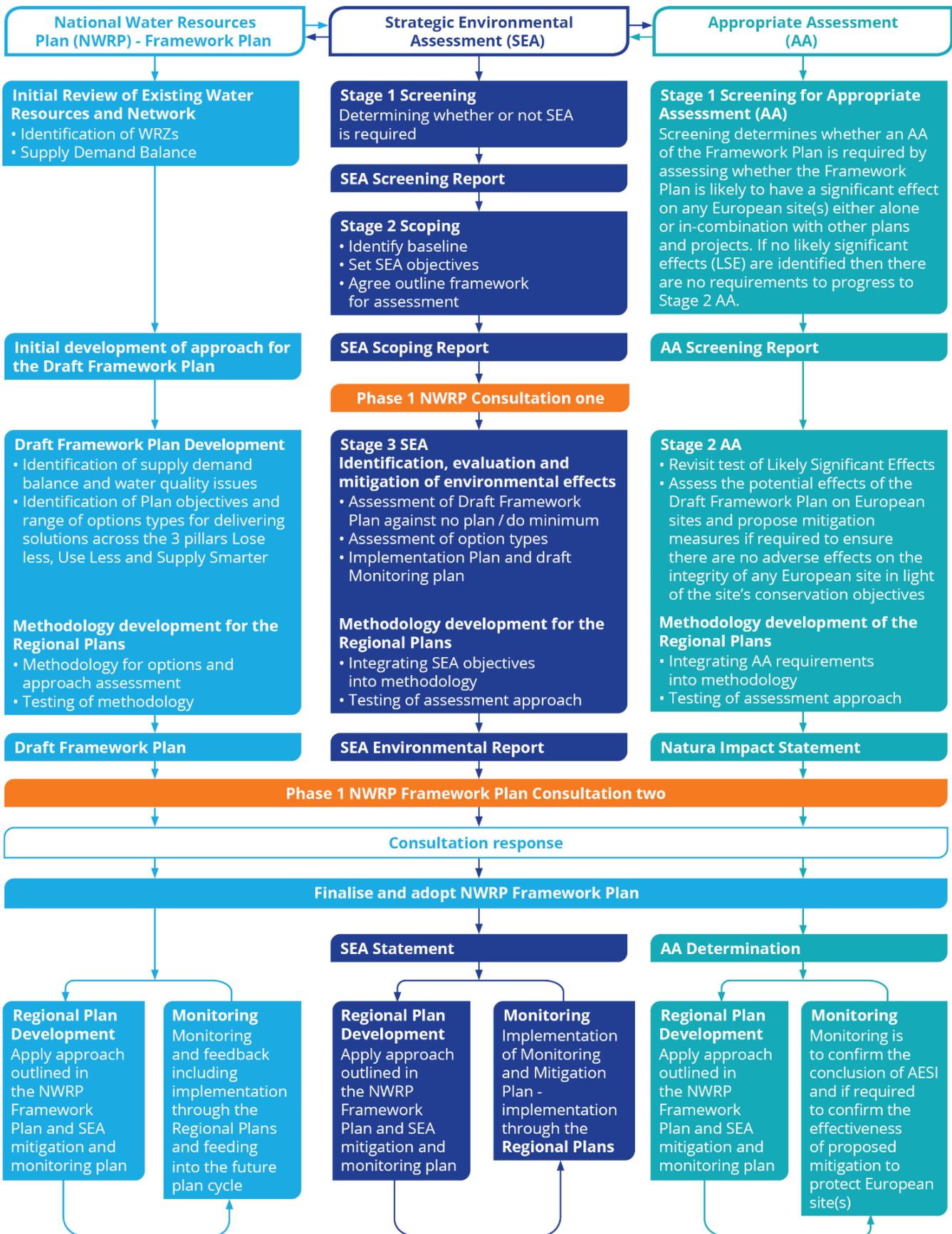


Figure 3.1 Integration between SEA and AA process and development of the Framework Plan

3.2 SEA input to alternative options and plan approaches

3.2.1 Consideration of alternatives

The Framework Plan is focused on understanding the challenges for water supply and demand management in terms of improving levels of service, meeting new regulatory requirements as well as taking account of climate change and identifying the supply demand balance (SDB) across the water resource zones (WRZ). The plan therefore proposes methodologies and actions for finding solutions, addressing uncertainty and improving operations rather than identifying the specific investment proposals for addressing supply demand deficits.

The Framework Plan identifies the basis for determining water resource need, water quality, reliability and sustainability issues, provides a framework for identifying solutions based on the Three Pillar Approach: Lose Less, Use Less and Supply Smarter and sets out a methodology (including Options Assessment and Preferred Approach methodology) that will be used to identify preferred solutions for each area of supply through the Regional Plans. A range of potential methodologies were considered based on resource planning methodologies used in other jurisdictions and the proposed methodology for the NWRP was aligned with the approach applied in the UK (England and Wales) due to the similarities between the legislative framework for water services, catchment level populations, water asset bases and water supply asset bases, while recognising existing constraints such as data limitations. In contrast, the methodologies used in jurisdictions other than the UK arose in very different contexts and were not considered to be a viable starting point to develop a methodology suitable to the Irish context.

An assessment of the 'without plan' scenario (i.e. continuation of the existing approach to water supply planning) was undertaken which found that the 'with plan' scenario would provide benefits in terms of applying the Three Pillar Approach (Lose Less, Use Less and Supply Smarter) and facilitating the early identification of environmental considerations, mitigation and enhancement opportunities early in the option development process (see Chapter 8 of the SEA Environmental Report). Table 3.2 shows the outcomes of this assessment against each of the 10 environmental topic areas scoped in for assessment.

As such, no other alternative plan methodologies or scenarios were identified as a reasonable way to achieve the objectives of the Framework Plan; WSSP and Water Services Act 2013.

Table 3.1 Comparison of 'With Plan' and 'Without Plan' scenarios

Plan alternative	Population, economy, tourism and recreation and human health	Water environment (quality and resources)	Water environment (flood risk)	Biodiversity	Material assets	Landscape and visual amenity	Climate change (mitigation)	Climate change (adaptation)	Cultural heritage	Geology and soils
• Without plan	-	-	0	+/-	-	0	0	-	0	0
• With plan	+	+/-	0	+/-	+	+/-	+/-	+	0/-	0
Key										
Likely to have a positive effect			+							
Likely to have a negative effect			-							
Effects are uncertain or not applicable			? or N/A							
Likely to have a neutral effect			0							
Likely to have a mixed positive and negative effect			+/-							
Likely to have mixed neutral and negative effect			0/-							
Likely to have mixed neutral and positive effect			0/+							

3.2.2 Plan approaches

The Framework Plan includes an eight stage options and approach assessment methodology (see Figure 3.2) that will be used for option development, approach comparison and preferred approach selection during development of the four Regional Plans. The options and approach assessment methodology aligned with the seven standard steps set out in the Department of Public Expenditure and Reform (2019) guidance document “*Public Spending Code: A Guide to Evaluating, Planning and Managing Current Expenditure*”.

The methodology is focused on ensuring that Irish Water promote solutions that are resilient, environmentally sustainable, and flexible to the changing environment and demands. It is based around the five following criteria:

- Resilience;
- Deliverability and Flexibility;
- Progressibility;

- Sustainability (Environmental and Social Impacts); and
- Cost.

Figure 3.2 outlines how SEA requirements are integrated into each stage of this process, with further detail provided in Table 3.2. The SEA objectives identified at the scoping stage of the SEA process for each of the ten environmental topic area scoped in for assessment (as shown in Table 3.1) are used as a basis for assessing the beneficial and adverse impacts on the environment at all stages of the options and approach development process.

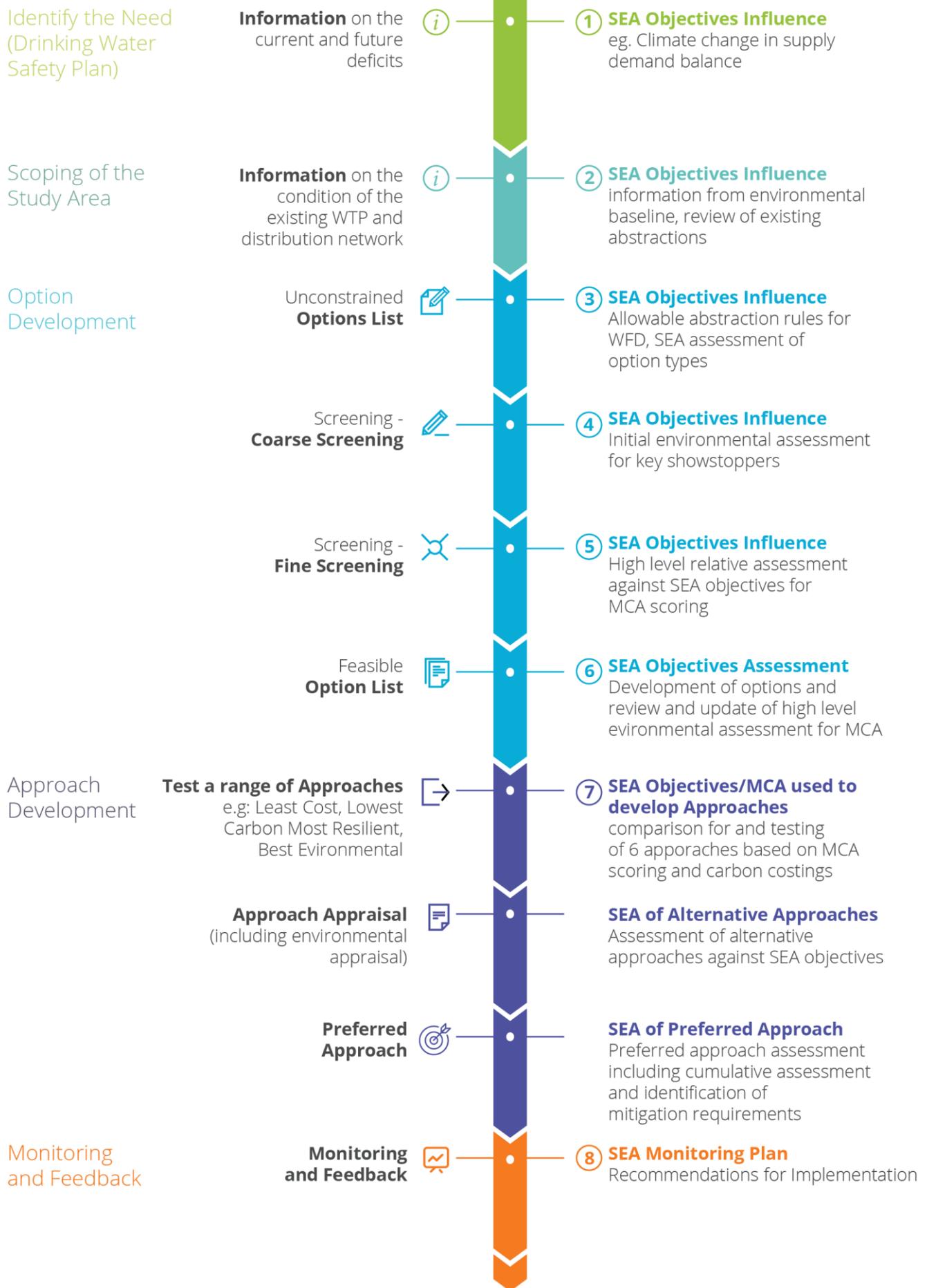


Figure 3.2 Option and Approach Development Process

Table 3.2 SEA requirements implemented through options and approach assessment methodology

Stage (and brief description of process)	SEA considerations and requirements for each stage
<p>Stage 1: Identify the need</p> <p>Identification of public water supply needs (quality and quantity) based on Supply and Demand Balance (SDB) and/or Drinking Water Safety Plan Barrier Assessment</p>	<p>Environmental aspects considered related to SEA objectives include:</p> <ul style="list-style-type: none"> climate change affecting future water supply; and public health requirements for access to good quality drinking water.
<p>Stage 2: Scoping of the Study Area</p> <p>Understanding the study area and condition of existing assets, and consideration of sustainability of existing abstractions.</p>	<p>Consideration of environmental constraints and opportunities as part of this needs study and to link to other initiatives and ongoing projects, such as the climate sensitive catchments, drinking water quality assessments and WTP residuals disposal management.</p>
<p>Stage 3: Unconstrained options</p> <p>Production of list of unconstrained options (possible solutions which partly or fully resolve a water supply deficit) by generic options types. Options could be at WRZ, Study Area, Regional and Inter-Regional level.</p>	<p>High level consideration of abstraction sustainability in relation to identifying level of allowable abstraction (related to SEA objective on water) for new abstraction. WFD water body status and objectives are taken into account through a review of existing abstractions and in the identification of new options. This is applied as a rule so that new options can meet allowable abstraction criteria.</p>
<p>Stage 4: Coarse screening</p> <p>Coarse Screening of the unconstrained options is undertaken to eliminate options that have fundamental issues meaning they are unlikely to ever be delivered.</p>	<p>Removal of options which are clearly likely to conflict with SEA objectives and expected to be difficult to mitigate through coarse screening. This is supportive of the SEA objectives and the environmental reasons for removing options will be clearly recorded.</p>
<p>Stage 5: Fine Screening</p> <p>An analysis of the Constrained Options against a range of detailed criteria, through a process known as Multi-Criteria Analysis (MCA). The objective of the MCA and the fine screening process is to determine the potential benefits and impacts of the options across a range of key criteria to identify any additional options that should be removed and to compare the options.</p>	<p>The SEA topics and objectives are the basis for identifying key questions and developing the criteria for the environmental assessment and for scoring of options in the fine screening and multi-criteria analysis (MCA). The MCA is then used in the comparison of options and option combinations in stage 7.</p>

Stage (and brief description of process)	SEA considerations and requirements for each stage
<p>Stage 6: Feasible Options List – Option Costing</p> <p>Production of an outline design and estimated cost for each option on the list.</p> <p>Environmental and social valuation of option undertaken to feed into approach appraisal process.</p> <p>Removal of worst performing options where there are large numbers of constrained options, or removal of unfeasible/unsustainable/unviable options where limited constrained options are available</p>	<p>Environmental performance against the SEA objectives is reflected in the MCA scoring against environmental criteria and these are reviewed and updated to reflect the option dossier information following outline design and to follow scoring rules.</p> <p>The environmental MCA criteria are based on the SEA objectives from the SEA Scoping Report and as consulted on with environmental stakeholders. Some criteria/screening questions may be more relevant to some options types than others.</p> <p>Habitats Directive considerations have been integrated into the Options Assessment Methodology at a number of points to ensure both robust assessment and protection are integrated into the plan. In particular, this is demonstrated through the MCA/fine screening scoring for the European sites and through the consideration of mitigation measures to avoid adverse effects that have been identified in the Framework Plan AA process.</p>
<p>Stage 7: Approach development</p> <p>Feasible Options are assessed individually or as option combinations forming different potential approaches to identify the preferred option or combination of options to meet the need for each WRZ, Study Area and Regional Group area.</p> <p>Options are identified for:</p> <ul style="list-style-type: none"> Least Cost Best Appropriate Assessment (Best AA) sub-criteria Quickest Delivery Best Environmental. Most Resilient Lowest Carbon 	<p>Approach development included consideration of three approaches providing focus on different environmental topics, Best AA, Best Environment and Lowest Carbon</p> <p>The Best AA approach gives maximum consideration to the Options with no potential for impacts on European Designated (no Likely Significant Effects or LSEs) sites or Options with LSEs that can be addressed with general/standard mitigation measures at the project level. It puts avoidance of impacts on European sites at the forefront taking account of the fact that Options with a high likelihood of significant effects which could lead to adverse effects on a European Site have already been removed at Coarse Screening stage. This can equally be described as giving maximum consideration to the Options with the Least Impact on European Sites</p> <p>Best Environment - for each option or combination of options, the MCA includes assessment across all SEA objectives and sub-criteria, using the sum of</p>

Stage (and brief description of process)	SEA considerations and requirements for each stage
	<p>positive scores and the sum of negative scores separately and avoiding combining positive and negative scores.</p> <p>The scoring is also reviewed against:</p> <ul style="list-style-type: none"> Individual criteria to identify where high negative or positive scores indicate potential for significant adverse or beneficial effects (for example the number of -3 scores); and How the assessment reflects important differences between options focusing on where these related to potential operational or long term effects and also the range of difference in the scoring. <p>This provides a basis for comparing each option and the option combinations on a relative performance basis. The potential approaches are also assessed in terms of overall performance against the SEA objectives against a do minimum scenario.</p> <p>Lowest carbon - for each option carbon emissions are calculated for embodied carbon as one-off costs and annual operational carbon and these are monetized to give a scheme NPV cost.</p> <p>Preferred approaches are further assessed against the objectives based and subject to cumulative effects assessments which is fed back into the decision-making process where significant cumulative effects are identified.</p> <p>SEA performance is assessed at each stage in the process to alternative options and approach combinations at the following levels:</p> <ul style="list-style-type: none"> WRZ Study Area level including cumulative effects assessment Regional level including cumulative effects assessment Inter regional level -the final step will be to assess any inter-regional options and potential cumulative or in combination effects and determine if

Stage (and brief description of process)	SEA considerations and requirements for each stage
	<p>any adjustment is required (this will be addressed based on the Regional Plans under development where information and will be updated as needed for each of the Regional Plans in turn).</p>
<p>Stage 8: Monitoring and feedback</p> <p>This stage allows for ongoing data improvement to feed into updates to the Regional Plans and a commitment for the results from implementing the Monitoring Plan and Environmental Action Plan (EAP) to be taken into account within the plan period and in the preparation of the next plan cycle.</p>	<p>This SEA Statement provides a Monitoring Plan and Environmental Action Plan. These plans provide a framework for identifying significant effects as the Framework Plan is implemented through the Regional Plans and sets out recommendations for mitigation in the EAP – these have been updated to take account of consultation comments.</p>

3.3 SEA and consultation influence on the Final Plan

Consultation comments received on the statutory public consultation for the draft Framework Plan and accompanying Environmental Report, and responses and subsequent actions taken to address these comments, are summarised in Appendix A. Further detail regarding consultation responses is also provided in the NWRP Consultation Two Report (Irish Water, 2021). Many of the consultation comments received were supportive of the Framework Plan, SEA and NIS, however key changes and clarifications requested related primarily to:

- Consideration of projected population and economic growth within the Framework Plan, including anticipated timescales, justification on the regional boundaries, and alignment with other relevant spatial planning documents;
- Inclusion of additional plans and policies and baseline information within the SEA;
- Consideration of climate change related impacts on water supply infrastructure and water resources (particularly groundwater);
- Concern regarding the methods proposed for estimating hydrological yield from groundwater sources, impact of upcoming abstraction legislation on groundwater resources; and
- Inclusion of the EAP and Monitoring Plan in the Framework Plan, setting timescales for the completion of monitoring activities and clarity on where accountability for completion of monitoring activities lies.

Table 3.3 summarises consultation responses received and subsequent changes to the SEA and Framework Plan informed by these responses.

The submissions received through the consultation process on the Environmental Report are considered not to materially affect the outcome of the assessment and in consequence, Irish Water has determined that no further assessment of the Framework Plan is needed. The Framework Plan has been updated to include the additional information and clarifications to respond to the comments made. Irish Water will take account of the comments in the development of the Regional Plans and the environmental assessments for these plans.

Table 3.3 Summary of consultation responses and changes to SEA and Framework Plan

Key issues/themes raised	SEA response	Summary of action taken
Environmental Authorities		
EPA		
<p>Request for further clarity on how preferred approaches will be determined at Water Resource Zone (WRZ) level, criteria that have been used in determining ‘water available for use’ in the absence of the pending abstraction legislation and to clearly define sustainability criteria and benchmarks used in the NWRP</p>	<p>Further clarification is provided in the Framework Plan on the sustainability criteria and benchmarks used. This recognises that more stringent environmental standards may mean that surface water and groundwater abstractions that were once regarded as acceptable may be considered to be unsustainable, particularly in dry weather conditions, in the context of new legislation. These abstractions may in the future be subject to modifications to meet the requirements of the WFD.</p> <p>The Framework Plan recognises that these more stringent environmental standards may generate uncertainty in some of our current estimates of deployable output and a commitment is made to work with the EPA through the licencing process to understand any potential impacts and these will then be integrated back into the NWRP assessments and options updated. Feasible options considered in the NWRP technical screening have incorporated theoretically conservative standards and limits in an aim to mitigate this uncertainty and these standards are explained below:</p> <p>The water abstraction standards used to assess the impact of new options are based on UKTAG guidance for achieving Good or High Status. Where the waterbody status is unassigned the use of standards for Good Status will ensure the proposed abstraction options will not prevent the achievement of good status when a status is assigned.</p> <p>Where an option that impacts a waterbody with unassigned status is chosen as part of the preferred approach, additional data collection to inform the assignment of a status will be identified for the project level studies. That data will be used to seek to ensure</p>	<p>Clarification included in the Framework Plan</p>

Key issues/themes raised	SEA response	Summary of action taken
	<p>that the EPA assigns a waterbody its status prior to consent for the specific project being sought</p>	
<p>Requirement to ensure that NWRP does not delay actions required to existing supplies under an EPA Direction or on the Remedial Action List (RAL).</p> <p>Recommendation that the NWRP should commit to monitoring a wider range of environmental contaminants and should be reviewed as needed in light of pending or future legislation changes.</p>	<p>Clarification has been included in the Framework Plan (chapter 5) explaining that Irish Water have started the process of source risk assessments for all surface water and ground water sources and using tools to characterize the catchments and identify diffuse and point source pollution and contaminants to inform the source risk assessment. These will be used to inform raw water monitoring programmes, areas for catchment interventions and treatment requirements.</p> <p>Irish Water recognises urgent priority need is determined via the Remedial Action List and by ongoing Irish Water programmes such as the National Disinfection Programme, the Leakage Reduction Programme and the National Drought Programme (and leakage reduction programme). The aim of the National Disinfection Programme is to upgrade and standardise disinfection systems across the country in a two-phase approach: 1) Assess the WTPs and 2) Complete upgrade works.</p> <p>Through the Regional Plan options assessment phase additional critical water quality risks may be identified and interim solutions such as delivery of prefabricated packaged WTPs and pump replacement offer temporary short-term management solutions.</p>	<p>Clarification included in the Framework Plan</p>
<p>Additional plans recommended for consideration including the 2020 State of Environment Report, draft Agri-food Strategy 2030, EU Biodiversity Strategy to 2030, National Biodiversity Action Plan, All Ireland Pollinator Plan, National Planning Framework, National Waste Action Plan for a Circular Economy, National Climate Action Plan 2019, Climate Change Adaptation Plan for the Health Sector 2019-2024, Fáilte Ireland's 10 Year Tourism Strategy, Fáilte Ireland Visitor Experience Development Plans, Waterways Ireland Tourism Masterplan for the River Shannon, National</p>	<p>Additional plans, policies and programmes have been reviewed and will be incorporated into the Planning, Policy and Programmes (PPP) review for the Regional Plan SEAs. These additional document reviews do not materially change the environmental assessment of the Framework Plan. The updated list of PPP documents is provided in Appendix A.</p>	<p>Taken forward to The Regional Plans' SEA scoping reports and assessments. Irish Water will consider the European Green Deal in the implementation of the NWRP,</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>Hazardous Waste Management Plan, draft Flood Risk Management Plan 2021-2027 and European Green Deal.*</p>		<p>particularly in developing strategic funding requirements for water services</p>
<p>EAP and Monitoring Plan should be included in the Framework Plan, along with a commitment to report on environmental monitoring and actions within specified timescales.</p> <p>Monitoring programme should be flexible and address possibility of cumulative effects.</p> <p>Monitoring indicators and targets should have reference numbers.</p>	<p>The updated EAP and Monitoring Plan (see Chapter 4) are referenced within the final Framework Plan (section 8.3.8.1) and commitment to implement these and report on the monitoring and actions identified within the timescales provided.</p> <p>The requirement for flexibility and responsiveness and addressing potential cumulative effects is provided for through Stage 8 monitoring and feedback of the Framework Plan methodology. Clarification has been added to explain how the EAP and Monitoring Plan will be part of this feedback process.</p> <p>The EAP and Monitoring Plan have been updated to include commitment to annual review by IW informed by option/project development environmental review and update at each stage with specific consideration for potential cumulative effects and collection of information on the relevant indicators.</p> <p>Monitoring indicator and target reference numbers are added,</p>	<p>Framework Plan updated and linked to the final EAP and Monitoring Plan in this SEA Statement</p> <p>SEA Statement Monitoring Plan updated</p>
<p>Set out Regional Plans in context of the National Planning Framework and three Regional Spatial Economic Strategies.</p>	<p>A new graphic has been added to the final Framework Plan illustrating the relationship between these four plans.</p>	<p>Update to final Framework Plan</p>
<p>Comments on the assessment process including:</p> <p>Need to identify any significant data gaps</p> <p>Comment on identified vulnerability of water-related service infrastructure to storm events</p> <p>Identify where acoustic screening measures have already been implemented in water treatment plans etc</p>	<p>Information regarding data gaps and additional interrelationships between air quality, climate change, cultural heritage and geology SEA topics will be considered with the SEAs for the Regional Plans. These are not material to the environmental assessment of the Framework Plan.</p> <p>The specific vulnerability of existing and planned infrastructure included in the options appraisal process for the Regional Plans will be explored in the SEA for the Regional Plans.</p>	<p>Taken forward to the Regional Plan SEAs</p> <p>Updates to the final Framework Plan to clarify.</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>Consider potential for linkages between air quality and climate change, and cultural heritage and geology</p> <p>Describe how residuals from water treatment processes will be managed</p> <p>Consider recent EPA publications including Good Practice Guidance note on cumulative Effects Assessment in Strategic Environmental Assessment (2020) Suggestion to use www.enviromap.ie to identify receptors at Regional Plan level</p>	<p>The need for acoustic screening measures will be assessed at project level for all preferred approaches options that are developed through the NWRP. The proposed management of residuals from the water treatment process is outlined in Appendix K to the Framework Plan.</p> <p>The EPA Good Practice Guidance Note on Cumulative Effects Assessment in Strategic Environmental Assessment in 2020 will be taken into account in the approach applied for cumulative assessment in the Regional Plan SEAs. The EPA site: www.enviromap.ie will be used to support identification of potential receptors for SEAs of the Regional Plans.</p>	
Department of Agriculture, Food and the Marine (DAFM)		
<p>Nitrogen and phosphorus loading to the marine environment have been increasing since 2014 which are not fully addressed through the Marine Strategy Framework Directive (MSFD) Programme of Measures.</p>	Noted	None required
Department of Tourism, Culture, Arts, Gaeltacht, Sport and Media – Development Applications Unit (DAU)		
<p>Consideration of tourism within the SEA and Framework Plan welcomed. Note that new tourism policy is being developed over the coming years.</p>	Noted	None required
No response was received from the Department of Housing, Local Government and Heritage (DHLGH), Department of the Environment, Climate and Communications (DECC)		
Transboundary consultation: Northern Ireland Department of Agriculture Environment and Rural Affairs (DAERA)		
<p>Transboundary effects: Consideration of transboundary effects was generally welcomed, however DAERA noted that Northern Ireland's second Climate Change Adaptation Programme (NICCAP2) Water Resource and Supply Resilience Plan (WR&SR Plan), and the Fisheries Act (NI)</p>	<p>NICCAP2 and all other documents listed will be noted in the Transboundary section of the SEA for the North West and Eastern and Midland Regional Plans and are including in the updated PPP review documents list provided in Appendix A. The River Erne system will be taken forward to the North West Regional Plan.</p>	<p>Updated PPP review will be taken forward to the Regional Plans SEAs</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>1966 and draft Flood Risk Management Plan 2021-2027 Northern Ireland, Marine Act(Northern Ireland) 2013, the UK Marine Policy Statement and draft Marine Plan for Northern Ireland should be considered.* It was also noted that maintenance plans for any structures introduced to watercourses should consider potential transboundary issues.</p> <p>The Inland Waterways Association of Ireland (IWAI) requested that the River Erne be considered as transboundary waterbodies and catchment and DAERA requested that transboundary effects in the marine environment are considered and that River Erne and Melvin waterbodies and catchments should be included.</p>	<p>This additional document review and receptor do not materially change the environmental assessment of the Framework Plan.</p> <p>Maintenance plans for structures introduced in water bodies will be incorporated into the scoping documents for infrastructure developments at project level.</p> <p>The River Erne and Melvin catchment will be added to transboundary waterbodies considered in the SEA for the relevant Regional Plans, and the Regional Plans will also consider transboundary effects in the marine environment</p>	
<p>No separate response was received from the Northern Ireland Environment Agency (NIEA)</p>		
Other stakeholders and members of the public		
<p>SEA process: Suggestion that potential environmental impacts identified for desalination options should be reviewed in light of a recently published development process. Request for a more comprehensive response regarding sensitive sites and recommendation that measurements for abstractions over 20m³/day should be taken as part of a licensing regime, which should be used to assess and regulate ecological impacts.</p>	<p>Up to date process development information will be considered as part of the options development process outlined in the Framework Plan and in the SEA undertaken for the Regional Plans. The SEAs for the Regional Plans will also provide specific information regarding option level and cumulative impacts on sensitive sites.</p>	<p>None – comments to be addressed through Regional Plans SEAs</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>SEA approach: General support for the SEA and NIS approaches, with the exception of the Environmental Trust Ireland who stated that the SEA report and the Natura Impact Statement are inadequate and not in accordance with EU law. One stakeholder stated that many of the actions required to improve Ireland’s environmental performance would be complementary to Irish Water’s activities. There was also uncertainty over how the “three ecosystem services of interest (climate regulation, food – crops and livestock, and traffic-related impacts)” have been identified and rationale for excluding other ecosystem services, and a request to consider impacts on heritage assets from changes in hydrology.</p>	<p>Irish Water is satisfied that the SEA Environmental Report and NIS fully meet the requirements of the SEA Directive, Habitats Directive and associated implementing regulations for a plan level assessment.</p> <p>The Framework Plan proposes methodologies and actions for finding solutions to the forecast water supply deficit, addressing uncertainty and improving operations rather than identifying the specific investment proposals for addressing supply demand deficits. As such no environmental assessment of individual water supply options has been undertaken but will be included as part of the Regional Plan assessments.</p> <p>The Framework Plan provided additional explanation on the basis for the four regions. The development of four RWRPs is a mechanism for efficient delivery of the NWRP. The outputs of the four RWRPs will be combined for prioritisation and progression through the future cycles of capital investment planning. The Strategic Environmental Assessment (SEA) Environmental Reports and Natura Impact Statement (NIS) for each subsequent Regional Plan will consider the cumulative impacts and in-combination effects with the preceding Regional Plan(s) and adjustments can be made to address any cumulative impacts identified.</p> <p>Four Regional Plans will be produced under Phase 2 of the NWRP. These Regional Plans will identify potential water supply options to address the identified SDB in accordance with the methodology set out in the Framework Plan, and each Regional Plan will be subject to a separate SEA and AA process. The SEA and AA for each Regional Plan will assess the potential impacts of options including within the Preferred Approach and Alternatives on the environmental topics which are scoped into assessment for that specific plan and on Natura 2000 sites.</p> <p>Any preferred approach that is prioritised and included/initiated within a capital investment cycle will include feasibility studies and project-level applications for</p>	<p>Clarifications added to final Framework Plan.</p> <p>Comments taken forward to Regional Plan process including the SEA Scoping Reports and SEA Environmental Reports, for the Regional Plans</p>

Key issues/themes raised	SEA response	Summary of action taken
	<p>consents as required, and full site level environmental assessments will be carried out as necessary at that point</p> <p>Further clarification regarding identification of the principal ecosystems of interest selected for inclusion in the monetary valuation of effects and rationale for not monetising others will be provided in the Regional Plan SEA Environmental Reports. However, it is noted that approach set out for environmental assessment provides the basis for a qualitative assessment of the full range of environmental topics. Irish Water aim to further integrate consideration of natural capital and ecosystems services into their preferred approaches as they progress through the resource planning cycles.</p> <p>Consideration is given to potential impacts on heritage interests within our options assessment process and will be taken forward through to project level assessments as potential routes and locations of infrastructure are identified. Impacts on heritage from changes to hydrology will be considered as part of these more detailed assessments. Impacts on heritage assets from changes in hydrology are included in the Monitoring Plan (see Chapter 4) and actions identified to be taken forward for assessment at project level.</p>	
<p>Consultation: Geological Survey Ireland (GSI) requested access to all groundwater source protection information to fulfil their role as a statutory consultee for SEA. They also commented that groundwater represents an important, naturally good quality and resilient source of water in Ireland which is not acknowledged in the Framework Plan.</p>	<p>Irish Water will share all available and emerging data in relation to groundwater source protection and set up a steering group including the EPA Hydrometrics Team and GSI as part of the development of further studies on existing and potential future groundwater supplies. Irish Water will also incorporate information from the GSI regional assessments, into our options assessments as it becomes available. Section 3.2.2 of the final Framework Plan has been updated to reflect the strategic importance of groundwater as part of our national water resources plan.</p>	<p>Updates to the Framework Plan to explain groundwater source assessment</p> <p>Ongoing engagement with GSI to be continued throughout the development of the Regional Plans</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>Population, economy, tourism and recreation and human health: Several stakeholders commented on the projected growth across regions, cities and towns as identified in the National Planning Framework (NPF) and NPF Implementation Roadmap, RSES, MASPS and County Development Plans should be considered in the NWRP and supported financially. The importance of identifying water infrastructure needs in rural areas was also mentioned. Concerns were raised that water supply could limit growth and that supply-demand projections do not sufficiently consider economic growth.</p>	<p>Section 4.2.2 of the Framework Plan sets out how information from the NPF 2040, RSES and LPAs have been used to forecast population growth and to inform domestic demand scenarios across urban and rural areas. Section 4.3.2.3 sets out the assumptions underpinning the forecast for non-domestic demand, which takes into account growth forecasts from the NPF 2040, independent analysis for the Greater Dublin Area. Irish Water will also engage with the Department of Enterprise, Trade and Employment, Enterprise Ireland, IDA and Údarás na Gaeltachta in relation to forecasts for non-domestic growth requirements. Non-domestic demand forecasts will be continually assessed and the SDB updated as required.</p>	<p>Framework Plan updated to provide further clarity on assessment of domestic and non-domestic demand</p>
<p>Water environment: Several stakeholders commented on the water environment and requested consideration be given to cumulative impacts to the aquatic environment. The importance of sustainable management of hydrological regimes was raised, as well as specific comments requesting that the River Erne and Lough Melvin be considered as transboundary waterbodies and that transboundary effects in the marine environment will need to be considered. The GSI observed that Framework Plan does not include an adequate attempt to understand the impact of the upcoming abstraction legislation on groundwater source. IWAI noted there was no reference in the SEA to canals as freshwater ecosystems or to native or invasive aquatic weed growth on rivers or canals.</p>	<p>Cumulative effects on the aquatic environment will be considered in the SEA for the Regional Plans, which will assess the effects associated with Preferred and Alternative Approaches at option, study area, regional and inter-regional level. The River Erne and Lough Melvin will be considered as transboundary waterbodies and catchments in the SEA for the relevant Regional Plan, and the Regional Plans will also consider transboundary effects in the marine environment. Irish Water has submitted a full list of our abstractions to the EPA as required by SI No. 261 of 2018 which is called the European Union (Water Policy) (Abstractions Registration) Regulations 2018 as part of the new legislative framework on water abstraction. Irish Water will engage fully with the requirements of the new legislation, including general binding rules relating to measurement of abstraction. Consideration of canals as freshwater ecosystems will be included in the Regional Plan SEAs. Invasive species risks are included in the options assessment process and the issue of native or invasive aquatic weed growth on rivers or canals will be identified in the assessment reports.</p>	<p>Taken forward to the Regional Plans and SEAs for these plans.</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>Biodiversity: Aquatic biological diversity and fisheries resource should be considered, as well as the negative impacts on aquatic biodiversity from native or invasive weed growth in rivers and canals. DAERA noted potential for impacts on migratory species and also that they are able to provide advice regarding migratory species. Suggestions were made regarding the use of nature-based approach to Sustainable Drainage Systems and also the potential role of storage ponds in enhancing landscape, biodiversity and water quality. Request that the Framework Plan support the National Blue Dots Catchment Programme.</p>	<p>Section 6.5 of the SEA Environmental Report provides baseline information on aquatic biodiversity and there is an SEA objective to <i>‘Protect and, where possible, enhance terrestrial, aquatic and soil biodiversity; particularly European sites and protected species in undertaking water services.’</i> Further detailed baseline information and assessment of potential impacts on aquatic biodiversity and proposed mitigation will be provided in the SEA for the Regional Plans. Potential for incorporation of nature-based Sustainable Drainage Systems will also be considered at Regional Plan level. Irish Water will interface with IFI through the National Blue Dots Programme.</p>	<p>None – comments to be addressed through SEA for Regional Plans</p>
<p>Climate: Many stakeholders requested that climate change, and extreme and changing weather patterns associated with climate change, be addressed within the NWRP. There was a query regarding consideration of linkages between climate regulation and peatland and grassland habitats. The GSI commented that climate change impacts on groundwater resources needs consideration. Comments were also provided on the energy-efficient improvements that should be made to mitigate the effects of climate change, such as setting energy efficiency standards for buildings and phasing out fossil fuel heating.</p>	<p>Appendix F of the Framework Plan sets out how the impacts of climate change on surface and groundwater supplies has been considered. As Irish Water progresses through our resource planning cycles, and further engage with research bodies through our innovation function, they will further integrate natural capital and ecosystem services into our preferred approach assessments.</p> <p>The SEA for the Regional Plans will consider at option, study area and regional level opportunities to minimise carbon emissions associated with the construction and operation of new water supply infrastructure through measures such as the use of renewable energy sources and energy efficiency requirements.</p>	<p>Updates to the Framework Plan to clarify approach on groundwater assessment.</p> <p>Comments related to scheme impacts will be addressed through the SEAs for Regional Plans</p>
<p>Geology and soils: Comments that past and present land uses affect water quality, and query regarding whether effluent and water supplies in karst limestone areas are monitored to ensure high water quality conditions.</p>	<p>Links between land uses and water quality and sward height and groundwater infiltration are noted. The SEA for the Regional Plans will consider mitigation requirements for options included within the Preferred Approaches, including monitoring where appropriate. The role of conservation agricultural systems in</p>	<p>No change.</p> <p>Comments related to scheme impacts will be addressed</p>

Key issues/themes raised	SEA response	Summary of action taken
<p>Comments regarding the need to avoid land drainage in wetland areas, the relative merits of different sward heights in facilitating groundwater infiltration and the benefits of implementing conservation agriculture systems.</p>	<p>water quality and biodiversity are noted and these issues are relevant for catchment management initiatives which can benefit raw water quality (also see clarification included on source risk assessments and catchment level assessments in the Chapter 5 of the Framework Plan).</p>	<p>through the SEAs for Regional Plans.</p>
<p>Mitigation and monitoring: Comments two stakeholders querying where accountability for monitoring proposals lies and whether adequate mitigation measures were included within the National Water Resources Plan (NWRP)</p>	<p>The EAP sets out recommendations to address mitigation measures and the Monitoring Plan is presented in this SEA Statement. The final Framework Plan referenced the EAP and monitoring programme and commits to their implementation and includes these as part of the Stage 8 Monitoring and Feedback process. The SEA for the Regional Plans will identify further option specific mitigation measures as the Preferred Approaches are developed and these will be included in the Regional Plan EAP and Monitoring Plans.</p>	<p>SEA Environmental Statement Monitoring Plan and EAP (Chapter 4)</p>

*Note updated Policy Plans and Programmes review documents referred to in Table 3.3 are listed in Appendix A



4

Implementation and monitoring

4 Implementation and monitoring

4.1 Objectives, targets and indicators

The SEA Directive requires that the significant environmental effects of the implementation of plans and programmes are monitored to identify at an early stage unforeseen adverse effects, and to be able to undertake appropriate remedial action. These are addressed through a Monitoring Plan identifying indicators and targets to measure performance against and an Environmental Action Plan which sets out the SEA recommendations and mitigation measures to take forward.

4.2 Monitoring plan

The Public Water Supply in Ireland is a live asset base and is subject to continuous change. Similarly, the development of Preferred Approaches, as part of the coming Regional Plans, is influenced by evolving scientific data, understanding, and policy change in relation to the natural environment.

Irish Water must be able to continuously adapt to these changes, which may be minor or material in nature. Therefore, the Framework Plan commits to undertaking continuous monitoring and ensuring that there is a feedback mechanism within the Framework Plan and Regional Plans as outlined in the Stage 8 process (see section 8.3.8 in the Framework Plan). The Regional Plans are to be subject to formal review every five years; this continuous monitoring process will ensure that material amendments are assessed for significant impacts on the environment.

As the Framework Plan does not involve the recommendation of specific investment options, this Monitoring Plan is intended to track the progress of implementing the SEA recommendations during Regional Plan implementation.

The Monitoring Plan covers the integration of environmental and sustainability considerations throughout implementation of the Framework Plan and the options development methodology. It also provides a framework for future long-term monitoring. In most cases, more detailed baseline collection and project studies will be required to confirm the significance of environmental effects and ensure appropriate mitigation is included as part of the scheme designs.

The Monitoring Plan includes a recommendation for annual reviews to allow progress to be documented on a regular basis and to give sufficient basis for flexibility and responsiveness to issues arising as the Regional plans start to be implemented. The potential for cumulative effects will be considered as part of this process.

Table 4.1 Monitoring plan: indicators and targets

SEA topics	SEA indicators	SEA targets	Source data	Responsibility
Reporting timescale: included in Regional Plans and SEAs (developed during 2021-22)				
All topics and objectives	<p>MP AT1 Application of the options and approach assessment process, as set out in the Framework Plan, to integrate environmental, social and sustainability SEA objectives alongside other criteria in the preparation in the Regional plans</p> <p>MP AT2 Application of methodology for SEA and AA in the comparison and selection of Preferred Approaches for the preparation in the Regional Plans</p> <p>MP AT3 Environmental and social valuation methodology developed as a tool</p> <p>MP AT4 Transparent documentation of the appraisal and selection process</p>	<ul style="list-style-type: none"> T1 Options and plan approach to find sustainable solutions that contribute to environmental objectives 	Irish Water	Irish Water
All topics and objectives	<p>MP AT5</p> <ul style="list-style-type: none"> Iterative approach to the identification of appropriate options meeting objectives, and mitigation measures incorporated into project costs or risks, as part of the development of options for the Regional Plans and as a basis for future project costing. <p>MP AT6</p> <ul style="list-style-type: none"> Identification of process for undertaking the relevant options studies and feeding back where potential significant environmental effects are identified 	<ul style="list-style-type: none"> T2 Process implemented for iterative options assessment through identification, option design development stages and identification of mitigation measures and input to project costing T3 Option development for Preferred Approach options built on the SEA and AA work and incorporating feedback to the next Framework Plan and adequate comparison with alternatives at key points 	Irish Water	Irish Water

SEA topics	SEA indicators	SEA targets	Source data	Responsibility
Reporting timescale: to be phased for each Regional Plan area from 2022 onwards				
All topics and objectives	<p>MP AT7</p> <ul style="list-style-type: none"> Environmental assessment, including AA, for designated international and national sites potentially affected by drought measures <p>MP AT8</p> <ul style="list-style-type: none"> Communication plan for drought/freeze-thaw period actions 	<ul style="list-style-type: none"> T4 Source-specific environmental assessment and mitigation and monitoring measures agreed, avoiding long-term damage on designated sites and associated species from drought measures 	Irish Water	Irish Water
Reporting timescale: annual reviews from for each Regional Plan from 2022 onwards				
All topics and objectives	<p>MP AT9</p> <ul style="list-style-type: none"> Monitoring plan data collection implemented (see below for each topic) set up to support baseline information for the next Framework Plan, project level feedback, identification of cumulative effects, and providing the basis for monitoring future Framework Plan implementation 	<ul style="list-style-type: none"> T5 Monitoring plan data compiled for feeding into future Framework Plans and the Stage 8 Monitoring and Feedback process. 	Irish Water	Irish Water
Population, economy, tourism and recreation, and human health	<p>MP PH</p> <ol style="list-style-type: none"> Level of Service Frequency and duration of droughts needing management actions Number of days/hours when water supply to people is disrupted due to drought, freeze-thaw or other service/infrastructure issues Duration of works Number of complaints received relating to construction works Programmes and projects improving drinking water quality Awareness raising programmes on water conservation 	<ul style="list-style-type: none"> T6 Maintained or improved access to reliable and safe drinking water meeting forecast demand T7 Minimise extent and period of disruption to traffic related to construction T8 Minimise access restrictions and noise disturbance to people from construction and operation of schemes T9 Raised public awareness of actions to take for water conservation 	Irish Water IW (including project level information)	Irish Water
	<p>MP Rec</p> <ol style="list-style-type: none"> Number of public rights of way closures/diversions Length of paths created compared to loss 	<ul style="list-style-type: none"> T10 No net loss of important recreational amenity, improved access and support for new recreational amenity 	Irish Water IW (including project level information)	Irish Water

SEA topics	SEA indicators	SEA targets	Source data	Responsibility
Water environment	<p>MP WE</p> <ol style="list-style-type: none"> 1. Review of potential for catchment management to improve water quality/retain water 2. Number of investigations and contributions to catchment management schemes 3. Consider additional water quality and biological monitoring/data collection in addition to WFD monitoring data where needed 4. Projects undertaken contributing to water savings 5. Compliance with WSSP Strategy Objective to manage water supplies in an efficient and economic manner (WS3). Key indicator – Leakage expressed as a percentage of treated water put into the distribution system 	<ul style="list-style-type: none"> • T11 Improved environmental resilience and water quality within water resource use catchments • T12 Contribute to the achievement of “No deterioration” in status of waters (WFD objective) • T13 Contribution to restoration to “good” status of waters currently at “moderate”, “poor” or “bad” status (WFD objective) • T14 Reduced pollution inputs to groundwaters and prevent deterioration (WFD objective) • T15 Achieve sustainable economic level of leakage (SELL) for the Greater Dublin Area as identified in Appendix H of the draft Framework Plan • T16 Test all preferred approaches for sensitivity to leakage reduction targets 	Irish Water and EPA (including project level information)	Irish Water
	<p>MP FI</p> <ol style="list-style-type: none"> 1. Number of projects where flood risk assessment undertaken, and compensation required, or increase provided 	<ul style="list-style-type: none"> • T17 No net flood plain area lost as a result of the plan, and where possible increase functioning flood plain 	IW (including project level information) and EPA	Irish Water
Biodiversity, flora and fauna	<p>MP Bio</p> <ol style="list-style-type: none"> 1. Identification of existing abstractions or drinking water treatment residuals with risks to international or national designations 2. For designated nature conservation sites potentially affected by water resource options: <ol style="list-style-type: none"> i. Area of each designated site/type affected and the likely impact ii. Area of site with a predicted or recorded change in condition (positive or negative) 	<ul style="list-style-type: none"> • T18 No adverse effects on integrity of European, national or regional level designations and, where feasible, seek to contribute to achieving favourable conservation status • T19 No net loss of priority/valued habitats or habitat connectivity as a result of the works and, where 	NPWS, EPA and IW (including project level information)	Irish Water

SEA topics	SEA indicators	SEA targets	Source data	Responsibility
	3. Plan for/measurement of enhancement - area/length of habitat loss or affected vs restored	possible, demonstrate habitat enhancement/creation and <ul style="list-style-type: none"> reduced invasive species risk 		
Material assets	MP MA <ol style="list-style-type: none"> Area of permanent loss of greenfield land, including agricultural, forestry or other land uses Reported disruption to strategic infrastructure/services Waste management plans used on all new schemes Tonnes of residuals reused or recycled Reports on reduced abstraction to other users from new schemes 	<ul style="list-style-type: none"> T20 Minimise permanent loss of greenfield land, including agricultural, forestry or other land uses T21 Minimise material consumption and waste during construction and operation of schemes T22 Increase investment in existing and new water treatment and wastewater management infrastructure T23 No drinking water treatment residuals sent to landfill and no reduced abstraction to other users due to new schemes 	Irish Water, EPA and Local Authorities (LAs) IW (including project level information)	Irish Water
Landscape and visual amenity	MP LV <ol style="list-style-type: none"> Total working area of pipelines through protected landscapes, outside protected areas, and urban areas Development of protected landscape strategies to guide work in important and valued landscapes Land use/landscape features re-established for projects over an appropriate period – areas/km successfully restored to meet requirements 	<ul style="list-style-type: none"> T24 Improvement or no net change in landscape quality through landscape design and mitigation and enhancement 	Irish Water IW (including project level information)	Irish Water
Climate change	MP CCM <ol style="list-style-type: none"> Carbon footprint (total tonnes) of construction Percentage of energy supply from renewable sources or reduced energy use Carbon footprint (total tonnes) per year, predicted over plan period, lifetime of schemes and carbon intensity of water resource options (tonnes/ML/d) Operational Carbon Intensity kgsCO₂equic/ML 	<ul style="list-style-type: none"> T25 Benchmarked reduced carbon emissions from construction T26 Increased contribution of renewable/low carbon energy sources for existing and new schemes T27 Minimise the annual carbon emissions from operation and 	Irish Water IW (including project level information)	Irish Water

SEA topics	SEA indicators	SEA targets	Source data	Responsibility
	5. % improvement in energy efficiency	<p>Improve energy efficiency of water services</p> <ul style="list-style-type: none"> T28 Supported carbon offsetting schemes, including upper catchment schemes linked to biodiversity and water and population wellbeing (recreational) objectives 		
	<p>MP CCA</p> <ol style="list-style-type: none"> Lost time to flooding Lost time to power supply interruptions Improved mix of water resource sources or flexibility of system Reduced frequency of drought orders requiring change to normal abstractions/compensation releases 	<ul style="list-style-type: none"> T29 Improved resilience of environment to climate change 	Irish Water	Irish Water
Cultural heritage	<p>MP CH</p> <ol style="list-style-type: none"> Number of designated sites or other important archaeological or architectural heritage sites and/or their settings adversely affected by water resource options including through hydrological change from abstraction Number of schemes where options are rerouted to avoid cultural heritage impacts or length Number of schemes including improvements to access recording of assets or communication/interpretation of interest features 	<ul style="list-style-type: none"> T30 No unauthorised physical damage or alteration of the context of cultural heritage features due to Irish Water activities T31 All schemes developed applying best practice approaches for consultation, desk study and investigation and mitigation for cultural heritage and archaeological interest 	<p>Irish Water/IW IW (including project level information)</p> <p>Archaeological Survey of Ireland Sites and Monuments Record</p>	Irish Water
Geology and soils	<p>MP GS</p> <ol style="list-style-type: none"> Area of geological site affected by water resource options 	<ul style="list-style-type: none"> T32 No loss of statutory and non-statutory geological sites of interest 	Irish Water IWIW	Irish Water

SEA topics	SEA indicators	SEA targets	Source data	Responsibility
	2 Total area of soil removed or reused on schemes 3 Area of contaminated land restored, or soils removed	<ul style="list-style-type: none"> T33 Minimal disturbance or loss of high-quality land as a result of the Framework Work and minimal net loss of soil resources 	(including project level information)	

4.3 Environmental action plan

The EAP set out in Table 4.2 summarises the actions for mitigation and areas of further study identified in the Environmental Report and has been updated in response to consultation comments on the draft Framework Plan. The EAP is also included in section 8.3.8.1 of the Framework Plan. The EAP provides a basis for tracking recommendations from the SEA during the Framework Plan implementation and Regional Plan development.

Table 4.2 Environmental action plan

Ref no	Recommended Action for Mitigation / Further study	Target	Monitoring (timescale)
Identifying the need – quantity, quality and reliability			
Quantity – supply demand balance			
Abstractions and supply side yield assessments			
EAP1	EAP1.1 Link investigation on supply risks to environmental resilience and avoiding damage to vulnerable habitats and protected areas; especially European designated sites, and threats to WFD water body objectives.	Environmental issues to be included in risk assessments for supply shortages or drinking water quality issues.	Regional Plan SEA Environmental Reports 2021/2022 and implementation of projects.
Demand side data improvements: planning for future developments			
EAP2	EAP2.1 Reviews of WRZ configuration can consider potential environmental benefits from rationalisation opportunities to improve operational efficiency for waste and energy use and also reduce need for developing new sources.	Optimised WRZs/Study Areas	Regional Plan SEA Environmental Reports 2021/2022 and implementation of projects
	EAP2.1 Feed information on potential for water efficiency improvements to provide savings into future options identification		
Drinking water quality and reliability			
EAP3	EAP3.1 Understanding causes of water quality issues for drinking water can support catchment management actions. Link raw water element (RC3) on water quality compliance and ongoing programmes on improving drinking water quality to potential for long term solutions through to long term catchment management opportunities to reduce pollution in groundwater and surface waters and water treatment issues.	Source risk assessments and drinking water safety plans linked to the NWRP process.	Regional Plan SEA Environmental Reports 2021/2022 and Source risk assessments and drinking water safety plans ongoing – identify progress in annual reviews
	EAP3.2 Link Drinking Water Safety Plans to scoping of Study Areas, prioritisation and options development process including consideration of catchment management opportunities.		

Ref no	Recommended Action for Mitigation / Further study	Target	Monitoring (timescale)
	EAP3.3 Link ongoing projects with the supply demand assessments, scoping area studies and prioritisation for new investment. Consider as part of investment proposals for water treatment works – wider rationalisation opportunities with opportunities to reduce abstraction pressure on stressed sources and potential for improvements to residuals management (see also EAP 11.1)	Existing programmes and projects coordinated with the NWRP	Regional Plan SEA Environmental Reports 2021/2022 and implementation of projects
	EAP3.4 Value environmental and social benefits as well as costs in options development process (using environmental economics tools) to value long term solutions such as catchment management. Link also to development and application of natural capital and ecosystems approaches (see EAP10.2)	CBA and MCA supported by environmental valuation as well as qualitative assessment	Take forward into project development Include in next cycle of Regional Plans 2022 onwards
Delivering solutions – approach			
Climate change			
EAP4	EAP4.1 Take account of effects of climate change effects on protected areas and WFD objectives as well as water supply.	Environmental resilience as part of the climate change risk assessment informing long-term solutions.	Regional Plan SEA Environmental Reports 2021/2022 and implementation of projects. Catchment management to be considered in source risk assessment where appropriate - ongoing. Progress to be reviewed on an annual basis
	EAP4.2 Results completed, and ongoing climate change studies should be used to inform future scoping of Study Areas/WRZs and the types of solutions considered and prioritisation for investment.		
	EAP4.3 Long term actions to improve water retention in upper catchments as well as catchment wide water quality initiatives could be considered as responses.		
Lose less: leakage reduction			

Ref no	Recommended Action for Mitigation / Further study	Target	Monitoring (timescale)
EAP5	EAP 5.1 Take forward studies and actions supporting meeting leakage targets and include consideration of relieving pressure on existing deficit areas and abstractions with sustainability issue and drought risks.	Develop information to support and improve leakage reduction	Progress to be reviewed on an annual basis
Use less: water conservation			
EAP6	EAP6.1 Link to raising awareness on environmental benefits of water conservation.	Improved awareness of benefits of conserving water (day to day and during extreme events)	Awareness campaigns Progress to be reviewed on an annual basis
	EAP6.2 Consider customer research on the water supply and demand management including water efficiency options development along with local community and stakeholder views.		Customer consultation Progress to be reviewed on an annual basis
	EAP6.3 As data is developed to support understanding on water conservation, develop water conservation /water efficiency options to be considered as part of the Options Assessment Methodology for future plan cycles.	Monitoring and feedback stage 8 of the options assessment methodology	Progress to be reviewed on an annual basis
Supply smarter: capital investment and improved operations			
See EAP3, 4 and 5 in relation to linking ongoing programmes and future water resource planning and EAP10, 11 and 12 on implementing options and approach assessment methodology.			
Drought planning			
Information for assessing drought risks			
EAP7	EAP7.1 Identify the risks from potential drought actions for water sources designated for nature conservation value and supporting protected species - include lessons learned from the 2018 drought.	Drought -sources at risk identified	Drought management phased for each Regional Plan area 2022 onwards
Environmental mitigation of drought measures			

Ref no	Recommended Action for Mitigation / Further study	Target	Monitoring (timescale)
EAP8	EAP8.1 Assess potential impacts of drought restrictions on customers, especially vulnerable groups, to identify both communication requirements and exemptions on restrictions relevant for each management area.	Drought management avoiding causing temporary or long-term impacts on protected habitats and species as well as minimising restrictions to customers	Drought management: - social/environmental reviews - communication strategy Environmental assessment of sources at risk phased for each Region Plan area 2022 onwards
	EAP8.2 Develop drought communication plans and identify approaches to avoid impacts on vulnerable water users, for example, through exemptions – plan to provide customers with information early so that voluntary measures can be effective in avoiding the need for additional measures in most cases, and taking forward the approaches from the 2018 summer drought and 2020 spring drought.		
	EAP8.3 Prepare environmental assessments (including AA) for sensitive water sources at risk from drought management actions. These should be available in advance of measures being needed. They should include consultation on the assessments with environmental authorities and identify specific monitoring or mitigation measures.		
Residuals approach			
EAP9	EAP9.1 Include consideration of residuals management in the options development process involving WTPs or rationalisation opportunities	Residuals approach linked to options development process	Regional Plan SEA Environmental Reports 2021/2022 and implementation of projects
	EAP9.2 Apply the waste management hierarchy and with any solid waste disposal limited to appropriate licensed sites.		
Delivering solutions: options and approach assessment methodology			
Integration of environmental and sustainability considerations			
EAP10	EAP10.1 Study Area scoping to include analysis of environmental baseline issues, risks, constraints and opportunities to inform identification of initial options as providing context for the option development process.	Context for identifying and assessment options is provided	Regional Plan SEA Environmental Reports 2021/2022 Risk assessments and prioritization

Ref no	Recommended Action for Mitigation / Further study	Target	Monitoring (timescale)
	EAP10. 2 Further development of the environmental and social impact valuation methodology as a tool for the approach appraisal process, based on ecosystems services assessment/natural capital assessment principles, can support cost benefit analysis and MCA methodologies and provide quantitative information supporting SEA in the future.	CBA and MCA supported by environmental valuation as well as qualitative assessment	Take forward into project development Include in next cycle of Regional Plans 2022 onwards
	EAP10.3 Comparison of combinations of options (or approach) should include assessment of cumulative effects for each Study Area (groups of WRZs) and be considered in determining the best value approach. Justification for the approach selected will need to be provided.	Best environmental solutions considered in selection of preferred solutions with mitigation built into design and costing. Opportunities for enhancement to contribute to objectives to be considered	Regional Plan SEA Environmental Reports 2021/2022
Transboundary issues			
EAP11	EAP11.1 Ensure potential for transboundary impacts are considered during options assessment and early consultation is undertaken to inform the assessment process.	Avoid transboundary effects	Regional Plans SEA Environmental Reports 2021/2022
Delivering sustainable solutions			
EAP12	EAP12.1 Link the options development information and SEA mitigation recommendations into the initial studies and designs for selected project level schemes so that assumptions and mitigation recommendations are taken forward. Develop a monitoring information template to capture key environmental information at key project development stages recording: <ul style="list-style-type: none"> Project design/implementation stage and environmental assessment process applied and link to SEA and NIS recommendations 	Template developed and applied Preferred approach options taken to project stage subject to initial environmental review linking to information from	Monitoring Plan/ scheme development - progress to be reviewed on an annual basis

Ref no	Recommended Action for Mitigation / Further study	Target	Monitoring (timescale)
	<ul style="list-style-type: none"> • Data review and updates at each key stage • Report on Monitoring Plan indicators • Identify potential for cumulative effects 	<p>the options development and assessment process and to good practice procedures and Monitoring Plan criteria.</p>	
<p>EAP12.2 Development of procedures to integrate good practice approaches for avoiding/mitigating environmental impacts and identifying enhancement opportunities in future scheme design and development.</p>			
<p>EAP12.3 Ensure environmental mitigation and study requirements are covered in option costing and risk aspects are taken into account in scheme development.</p>			



5

Conclusions

5 Conclusions

The SEA process for the Framework Plan has ensured that sustainability considerations are integrated throughout the Options Assessment Methodology, from the initial identification of water quality and quantity need through to the selection of the Preferred Approach options. Consultation comments received from statutory environmental authorities and other stakeholders through the various consultation stages of Phase 1 of the NWRP have been considered and incorporated into the Framework Plan and considered within this SEA Statement as appropriate.

The SEA Environmental Report for the Framework Plan has made mitigation recommendations for the implementation of the Framework Plan which are included in the EAP, and the EAP will provide a basis for tracking recommendations from the SEA during the Framework Plan implementation and Regional Plan development. A Monitoring Plan has also been developed which covers the integration of environmental and sustainability considerations throughout implementation of the Framework Plan and the options development methodology and provides a framework for future long-term monitoring. The Monitoring Plan will track the implementation of the SEA recommendations during Regional Plan implementation.

The Regional Plans developed as Phase 2 of the NWRP will recommend specific new infrastructure development measures, and these will be developed in accordance with the Options Assessment Methodology in the Framework Plan and measures included within the EAP, supporting continued compliance with the SEA recommendations from Phase 1 of the NWRP.

Appendix A Policy, Plan and Programme Review Documents

Policy, plan and programme documents updated following consultation comments (changes in bold).

Theme	Policies, plans and programmes
All aspects	1 EU Sustainability Policy
	2 UN Sustainable Development Goals
	3 Our Sustainable Future, a Framework for Sustainable Development for Ireland
	4 Strategic Environmental Directive (2001/42/EC) and associated Irish legislation
	5 Environmental Impact Assessment Directive (2014/52/EU) and associated Irish legislation
	6 Environmental Liability Directive (2004/35/EC)
	7 European Green Deal
	8 Water Services Act, 2013
	9 Ireland 2040: Our Plan, National Planning Framework
	10 Water Services Policy Statement 2018 - 2025
	11 National Spatial Strategy for Ireland 2002-2020 (Department of the Environment and Local Government, 2002)
	12 Regional Spatial and Economic Strategies
	13 Planning and Development Act 2000 (as amended)
	14 Planning and Development Regulations 2001 (as amended)
	15 Capital Investment Plan 2016-2021
	16 Climate Action Plan 2019
	17 Ireland's Environment - An Integrated Assessment 2020
Population, economy, tourism and recreation and human health	18 Aarhus Convention
	19 Drinking Water Directive (98/83/EC)
	20 World Health Organization Guidelines for Drinking Water Quality
	21 Irish Water - Water Services Strategic Plan 2015
	22 Irish Water - National Wastewater Sludge Management Plan
	23 Irish Water - Lead in Drinking Water Mitigation Plan
	24 Healthy Ireland Framework
	25 Draft Agri-Food Strategy 2030
	26 Food Wise 2025
	27 Food Harvest 2020
	28 Fáilte Ireland's 10 Year Tourism Strategy,
	29 Fáilte Ireland Visitor Experience Development Plans
	30 EU Tourism Policy
	31 National Countryside Recreation Strategy
	32 Tourism Policy Statement
	33 Tourism Development and Innovation. A Strategy For Investment 2016-2022
	34 Tourism Action Plan 2019-2021
35 Waterways Ireland Tourism Masterplan for the River Shannon	
Water environment	36 Water Framework Directive (2000/60/EC)
	37 River Basin Management Plan (April 2018)
	38 General Scheme of the Water Environment (Abstractions) Bill 2018
	39 Bathing Water Directive (2006/7/EC)
	40 Floods Directive (2007/60/EC)
	41 Nitrates Directive (91/676/EEC)
	42 Urban Wastewater Treatment Directive (91/271/EEC)

Theme	Policies, plans and programmes
	<p>43 Marine Strategy Framework Directive (2008/56/EC)</p> <p>44 Groundwater Directive (2006/118/EC)</p> <p>45 Transposing Regulation for the above Directives</p> <p>46 Catchment Flood Risk Management (CFRAM) Programme</p> <p>47 Flood Risk Management Plans</p> <p>48 Draft Fourth Nitrates Action Programme</p> <p>49 Waterways Ireland Tourism Masterplan for the River Shannon</p> <p>50 National Marine Planning Framework</p>
Biodiversity, flora and fauna	<p>51 International and European Council Conventions</p> <p>52 EU Biodiversity Strategy for 2030</p> <p>53 The Habitats Directive (92/43/EEC)</p> <p>54 The Birds Directive (2009/147/EC)</p> <p>55 Green Infrastructure: Enhancing Europe's Natural Capital Strategy</p> <p>56 Creating Green Infrastructure for Ireland: Enhancing Natural Capital for Human Wellbeing</p> <p>57 Wildlife Act 1976-2010</p> <p>58 Shellfish Waters Directive (2006/113/EC)</p> <p>59 Fish Directive (2006/44/EC)</p> <p>60 Fisheries Consolidation Act, 1959</p> <p>61 European Communities (Birds and Natural Habitats) Regulations 2011 as amended (S.I. No. 477/2011)</p> <p>62 Other National Biodiversity related regulations</p> <p>63 National Biodiversity Action Plan</p> <p>64 All-Ireland Pollinator Plan</p>
Material assets	<p>65 Waste Framework Directive (2008/98/EC)</p> <p>66 Infrastructure and Capital Investment Plan 2016-2021</p> <p>67 Waste Management Acts 1996 – 2005</p> <p>68 Ireland 2040: Our Plan, National Planning Framework</p> <p>69 National Peatland Strategy</p> <p>70 Forestry Programme 2014-2020</p> <p>71 Waste Action Plan for a Circular Economy</p> <p>72 National Hazardous Waste Management Plan</p>
Landscape and visual amenity	<p>73 European Landscape Convention</p> <p>74 National Landscape Strategy for Ireland 2015-2025</p> <p>75 County Landscape Character Assessments</p>
Air quality	<p>76 Ambient Air Quality Directive (2008/50/EC)</p> <p>77 Industrial Emissions Directive (2010/75/EU)</p>
Noise	<p>78 Noise Directive (2002/49/EC)</p>
Climate change	<p>79 The Kyoto Protocol</p> <p>80 Paris Agreement 2015</p> <p>81 EU Energy and Climate (2020) Package 2009</p> <p>82 The Climate Action and Low Carbon Development Act 2015</p> <p>83 National Climate Change Adaptation Framework including the Sectoral Adaptation Plans including the Climate Change Adaptation for the Health Sector 2018-2024</p> <p>84 Ireland's National Policy Position on Climate Action and Low Carbon Development (2014)</p> <p>85 National Mitigation Plan</p>

Theme	Policies, plans and programmes
	86 Energy White Paper: Delivering a Sustainable Energy Future for Ireland – The Energy Policy Framework 2007-2020 87 National Renewable Energy Action Plan 88 Offshore Renewable Energy Development Plan 89 Irish Water Sustainable Energy Strategy 90 National Climate Action Plan 2019 91 European Green Deal
Cultural heritage (archaeological and architectural)	92 EU Conventions on Archaeological, Architectural and Cultural Heritage 93 Planning and Development Acts 94 Heritage Act 95 National Monuments Act 96 Architectural Heritage and Historic Monuments Act 97 County Heritage Plans
Geology and soils	98 Planning and Development Act 99 Action Plan for Rural Development
Transboundary	100 Planning Act (NI) 2011 101 Regional Development Strategy: Building a Better Future, 2035 102 Northern Ireland’s Second Climate Change Adaptation Programme 103 The Water Environment (Floods Directive) Regulations (Northern Ireland) 2009 104 Water Abstraction and Impoundment (Licensing) (Amendment) Regulations (Northern Ireland) 2007 105 The Water Supply (Water Quality) Regulations (NI) 2007, as amended (2015) 106 NI Water (2020) Our Strategy 2021-2046 107 NI Water (2020) Water Resource and Supply Resilience Plan 108 Fisheries Act (NI)1996 109 NI Draft Flood Risk Management Plan 2021-2027 110 Marine Act (Northern Ireland) 2013 111 UK Marine Policy Statement 112 Draft Marine Plan for Northern Ireland