

---

## **Request for Research Tender on** ***Projected climate change in Ireland and*** ***associated risk to water quality; policy*** ***recommendations for Ireland***

**Closing Date:**  
**Friday 17<sup>th</sup> June 2022**

**Queries to be addressed to:**

**Dr Triona McGrath**  
**Research Lead**  
**An Fóram Uisce**  
**[triona@nationalwaterforum.ie](mailto:triona@nationalwaterforum.ie)**  
**087 9858738**

**<https://thewaterforum.ie/>**

## Table of Contents

<b>1. INTRODUCTION TO THE WATER FORUM.....</b>	<b>3</b>
<b>2. RESEARCH BACKGROUND.....</b>	<b>4</b>
<b>3. PROJECT OVERVIEW.....</b>	<b>5</b>
<b>4. IMPACT OF RESEARCH.....</b>	<b>5</b>
<b>5. PROJECT DELIVERABLES .....</b>	<b>5</b>
<b>6. BUDGET.....</b>	<b>6</b>
<b>7. TIMELINES .....</b>	<b>6</b>
<b>8. MARKING SCHEME.....</b>	<b>6</b>
<b>9. SUBMISSION OF TENDERS .....</b>	<b>7</b>
<b>10. AWARD OF TENDERS.....</b>	<b>7</b>
<b>11. TERMS AND CONDITIONS.....</b>	<b>7</b>

## 1. INTRODUCTION TO THE WATER FORUM

The Water Forum (An Fóram Uisce) was established on a statutory basis in June 2018, in accordance with the Water Services Act 2017. The Forum has advisory roles in relation to the Minister for Housing, Local Government and Heritage, Irish Water, the Commission for Regulation of Utilities and the Water Policy Advisory Committee.

The Forum is the national statutory body representative of all stakeholders with an interest in the quality of Ireland's water bodies, to facilitate stakeholder input to water policy development in Ireland. The Forum consists of 25 members including representatives from a wide range of organisations with direct connection to issues relating to water quality and also public water consumers. Approximately 50 different organisations were involved in the nomination of members.

The Water Forum provides an opportunity for stakeholders to debate and analyse a range of issues with regard to water quality, rural water concerns, issues affecting customers of Irish Water and the implementation of the Water Framework Directive and Ireland's River Basin Management Plan. As an independent entity, the Forum has discretion to determine its own work programme and means of communicating its views and analysis. The vision of the Water Forum is for clean and healthy waters, supporting biodiversity, community wellbeing and economic sustainability. One of the roles of the Forum is to debate and analyse water issues related to climate change.

Dr Matt Crowe is the Chairperson of the Water Forum, Mr Donal Purcell is the Senior Executive Officer, Dr Triona McGrath is the Research Lead, Dr Gretta McCarron is the Communications and Education Lead, and Martin Ryan is the Administrative support.

Further information on the work of the Water Forum is available at [www.thewaterforum.ie](http://www.thewaterforum.ie)

## 2. RESEARCH BACKGROUND

The global climate change crisis is inextricably linked to water<sup>1</sup>. According to the UN Sixth IPCC report<sup>2</sup>, climate change is intensifying the water cycle and affecting precipitation patterns, with more intense rainfall events and associated flooding in some regions or extended droughts in others. Heavier rainfall and flooding can overwhelm sewage systems while also washing more soil and contaminants from land into our waters. Extended drought causes reductions in flows of rivers and streams thereby reducing dilution of pollutants and increases in nitrate leaching to groundwater, posing a threat to drinking water sources and aquatic ecosystems, particularly in coastal waters. Increasing temperatures can alter physical profiles of water bodies, increasing stratification and influencing water biogeochemistry and interactions between water and the sediment. Increasing storm intensity can bring more sediment and associated pollutants to water bodies, with associated impacts on water quality. Global warming may also increase soil organic matter decomposition and therefore the concentration of coloured carbon compounds in catchment waters, further increasing challenges for drinking water quality related to disinfection by-products.

Ireland's Climate Action Plan<sup>3</sup> sets out how Ireland will halve its greenhouse gases by 2030, with net zero emissions by 2050, where it is proposed as being a *“path to a secure future for ourselves and for future generations”*. The Plan indicates that climate change in Ireland will cause *“Further pressure on our water resources and food production systems with associated impacts on river and coastal ecosystems”*, along with *“poorer water quality”* (Page 13). Two of the nine potential impacts of climate change in Ireland are related to water quality (Page 202);

- Projected increases in the frequency of extreme precipitation events may result in more waterborne disease (e.g. E. coli) from contamination of drinking water as a result of overland flows of pollutants.
- Projected increases in the frequency of extreme precipitation events will result in increased levels of run-off and potential water quality issues, with implications for slurry storage and land spreading.

In 2019 the Department of Housing, Local Government and Heritage developed a sectoral climate change adaptation plan for water<sup>4</sup> (water quality and water services infrastructure) to present contingency plans to address the risks posed by climate change. Ireland's draft River Basin Management Plan 2022-2027 (RBMP), an essential national policy setting out the measures necessary to protect and restore the quality of Ireland's waters, has a proposed measure to *‘Update the Climate Adaptation Plan for the Water Quality and Water Infrastructure Sectors’*. The Water Forum will analyse and provide advise to the review of this sectoral adaptation plan for water.

Furthermore, the Climate Action Plan states that it is intended that future iterations of the Plan will map the national climate actions against the Sustainable Development Goals (SDG) indicators, to identify synergies and possible conflicts or gaps. The Water Forum is of the view that this policy

---

<sup>1</sup> [UN Water PolicyBrief ClimateChange Water.pdf \(unwater.org\)](#)

<sup>2</sup> [AR6 Climate Change 2021: The Physical Science Basis — IPCC](#)

<sup>3</sup> [gov.ie - Climate Action Plan 2021 \(www.gov.ie\)](#)

<sup>4</sup> [dhplg sectoral adaptation plan final en.pdf \(old.gov.ie\)](#)

mapping should also include where climate and water national policies align or conflict, in order to coordinate national efforts to maximise the capacity and impact of key legislation. This is in line with the Framework for Integrated Land and Landscape Management (FILLM)<sup>5</sup>, which has been adopted by the Water Forum as an overarching framework for environmental management and as a means of encouraging integrated thinking and actions in the areas of water resources, biodiversity, and climate change mitigation and adaptation.

### 3. PROJECT OVERVIEW

The Water Forum proposes to commission a piece of research to evaluate if and how Ireland's policies (e.g. Government, Irish Water or rural water policies) and climate change adaptation plans address the future risk to water quality from climate change, along with Ireland's ability to meeting its water quality objectives under the Water Framework Directive.

The research should include (but not limited to);

- An overview of how projected climate change for Ireland could influence water quality, for both public health (e.g. drinking water, bathing water) and aquatic ecosystems
- Evaluation of Ireland's current climate adaptation plans and their impact on water quality, identifying policy or data gaps or areas where policies could be better aligned
- Learnings from relevant international approaches to climate adaptation and water management
- Policy recommendations in the context of an integrated approach to addressing the climate and water crises, with a focus on water quality.

### 4. IMPACT OF RESEARCH

The proposed impact of this research is to inform thinking and policy development around climate change and water quality. The research would support dialogue with national stakeholders to support the Water Forum's advisory role in relation to water quality and the management of Ireland's water resources. It is envisioned that the research and policy recommendations could support the development and future revisions of climate and water policies to support their integration and provide context for the future review of the climate adaptation plan for the water sector.

### 5. PROJECT DELIVERABLES

The following deliverables are required for **all** awarded tenders:

- Final report, encompassing all research themes listed under Section 3.
- A Policy Brief document identifying the policy and data gaps in current national legislation, along with key policy recommendations to address water management in the context of future climate change.

---

<sup>5</sup> An Fóram Uisce (2021). Protecting and enhancing our environment: A Framework for Integrated Land and Landscape Management. Available from: <https://thewaterforum.ie/app/uploads/2021/03/TWF-FILLM-Report-Feb21-v9WEB.pdf>

## 6. BUDGET

The currency and invoices in which all prices and rates shall be quoted, and which payments under the contract will be paid, shall be Euros (€).

The **maximum budget is €24,950**, inclusive of VAT and overheads where applicable.

### 6.1 Payment Schedules

An upfront payment of 50% of the total agreed budget will be made upon receipt of invoice from the contracted service provider or institution following the initiation of the project.

A final payment of the remaining 50% of the total agreed budget will be made on project completion within the timeframes stated within Section 6, and following receipt of the final report.

## 7. TIMELINES

It is a requirement that this draft report is **completed on or before 1<sup>st</sup> November 2022** as per the timeframe outlined in Table 1.

**Table 1:** *Timeframe for project delivery*

Publication of tender	6 <sup>th</sup> May 2022
Deadline for tender submissions	17 <sup>th</sup> June 2022
Award of tender and start of project	To be confirmed with awardee
Project initiation meeting	To be confirmed with awardee
Draft report submitted	On or before 1 <sup>st</sup> November 2022

Following review of the draft report, a completed final report is to be submitted which takes into account proposed amendments to the draft report.

## 8. MARKING SCHEME

All submissions will be assessed by a panel of suitably qualified persons.

Marks will be awarded (maximum 100 marks) based solely on the information provided in the submission, as follows:

- Demonstrate a clear understanding of the subject matter of the brief and the requirements of the project (30 marks)
- Project management arrangements (10 marks)
- Details of budget, including compliance within the stated budget (10 marks)
- Timeline including mandatory GANTT chart outlining the timeline for project actions and deliverables (10 marks)
- Demonstrate relevant research track record of team appropriate to the subject matter, including previous/ongoing projects delivered and scientific publications (40 marks)

## 9. SUBMISSION OF TENDERS

Applications must be submitted no later than **4pm Friday 17<sup>th</sup> June 2022** via email to Dr Triona McGrath, Research Lead, the Water Forum: [triona@nationalwaterforum.ie](mailto:triona@nationalwaterforum.ie).

Submissions must include:

- A completed application form.
- A CV (max 4 pages) of the lead person to whom the tender will be awarded.

An acknowledgement of receipt of applications will be issued within 48 hours of the submission deadline.

## 10. AWARD OF TENDERS

**One** award will be made through this request for tenders.

Bodies of work may be initiated immediately from the date of award; however suitable timelines can be discussed between the awardee and the Forum's Research Lead after the award has been granted. The project will commence with an initial project meeting between the awardee and the Forum's Research Lead.

## 11. TERMS AND CONDITIONS

- All applications must be made using the official application form.
- Applications may be received from consortiums of individuals from different institutions. Such applications must identify the **lead person** to whom the tender may be awarded. All other members of the consortium will be sub-contracted by the lead person. The maximum total budget of €24,950 (inclusive of VAT and overheads) is applicable to single service provider applications and consortium applications respectively.
- The Water Forum will disqualify incomplete applications, applications not using the application form provided and any application received after closing time/date. Compliance with the word limitation contained on the Application Form is a requirement of the application process.
- It is a necessary requirement of the application process that the successful applicant must provide a copy of their Organisation/University/Institution's current Tax Clearance Certificate, after the grant has been offered.
- Failure to address within the final report each of the items included under Section 3 and the relevant thematic area will result in the withholding of final payment until all requirements are met.
- The Water Forum will have copyright ownership of any material developed for use by the Water Forum under the terms of this tender. The service provider may have a non-exclusive licence to use such material but only for its own purposes (to be agreed with the successful service provider).
- The principles of Ireland's National IP Protocol 2019 will be applied where there is any potential for commercial exploitation of project outputs resulting from this tender.
- The Water Forum encourages an open access publication policy. Publications arising from tender awards funded by the Water Forum should, as a minimum, ensure open access via

Green methods (depositing the peer-reviewed manuscript in an online repository before, at the same time, or after publication). All reports will be uploaded to, and publicly accessible via, the Water Forum's website: [www.nationalwaterforum.ie](http://www.nationalwaterforum.ie).

- Any publications arising from tender awards funded by the Water Forum must acknowledge An Fóram Uisce|the Water Forum as the source of funding.
- Projects funded by the Water Forum must uphold the highest standards of research integrity and the Water Forum expects all tender awardees to abide by the guidelines outlined in the National Policy Statement on Ensuring Research Integrity in Ireland; and the European Code of Conduct for Research Integrity.
- Data Protection and Freedom of Information – When an application is received by the Water Forum, a record is created in the name of the applicant. This information will be stored by the office of the Water Forum, where relevant, in paper/electronic form. Information that is collected by the Office, including information that you give us, is added to the record. You have the right, given by the Data Protection Act of 1988 and 2003, to a copy of your information at any time. The Office is also subject to the Freedom of Information (FOI) Act, 2014.

The information we record is used for the following purposes:

- Processing and assessing of applications;
- Payment arrangements;
- Auditing requirements;
- Informing and advising the Water Forum in relation to the Project and using same as a basis for further consideration by the Water Forum including research projects and policy analysis and recommendations;
- Publication of the Project Outcomes.

**End/**