



SFI Public Service Fellowship 2023

1. Name of Governmental Department or Agency
Geological Survey Ireland, Dept. of the Environment, Climate and Communications.
2. Title of the Project
GS17 Evaluating the impact of Geological Survey Ireland's coastal change assessment products to Irish society
3. Description of the Project
<p>Geological Survey Ireland is undertaking a National Coastal Change Assessment for informed coastal risk management. GSI is currently mapping the vulnerability of the coast to sea level rise and producing shoreline change rate maps (i.e. erosion/accretion) for the entire national coastline. The results from this assessment analyses past trends of coastal change, to indicate where potential exposure may lie in the future. The results are intended to support coastal management plans and the refinement of national and local climate adaptation plans. These products are disseminated to GSI's stakeholders via our web mapping services.</p> <p>The impact of these products to the wider Irish society can be qualitatively and quantitatively assessed. This will lead to more accurate metrics for inclusion in climate action plans (developed by the Department for the Environment, Climate and Communications), thereby helping to meet our climate targets and to achieve the legislative requirement to achieve a climate resilient, biodiversity rich and carbon neutral economy in Ireland by no later than the end of 2050. Furthermore, the Climate Action Plan 2023 highlights that every Local Authority will develop a comprehensive Climate Action Plan covering mitigation, adaptation, and citizen engagement, termed LA CAP. For local authorities with coastline, shoreline change assessment will be critical for establishing an evidence base in the first phase.</p> <p>The SFI Fellow will support this ongoing project by helping to increase the impact of GSI scientific and technical coastal assessment program for local communities, Local Authorities and other relevant (non-technical) stakeholders.</p>
4. Project Scope
<p>The overall aim of the Fellowship project is to assess the impact of GSI National Coastal Change Assessment to the broad Irish society. There are two coastal products developed by GSI to be assessed regarding their impact, namely Shoreline Change and Coastal Vulnerability mapping.</p> <p>In more detail, the objectives are:</p>

- a) Identify key stakeholders or users of coastal map products and develop best practice for meaningful engagement in the sector;
- b) Measure (quantitatively and qualitatively) the use of coastal vulnerability and shoreline change products among Irish stakeholders;
- c) Assess the impact of the coastal vulnerability and shoreline change mapping products across the different sectors and administration levels (national, regional, local); and, if possible,
- d) Develop a Cost-Benefit Analysis assessment for the two coastal products

The Fellow will primarily work within the Marine and Coastal Unit of Geological Survey Ireland, however there will be opportunity to engage with all programmes across the organisation. As a division of the Department of the Environment, Climate and Communications, the Fellow will also have an opportunity to engage directly with staff in collaborating national organisations (e.g. OPW, Met Éireann, Marine Institute) and academic partners and within DECC (including policy development, economic unit etc).

5. Skills/Expertise Required

The Fellow should have expertise and experience in one or more of the following: Social sciences, economics, policy development, implementation of stakeholder engagement tools. Knowledge of geology, geomorphology, physical geography is an advantage but not essential.

This project is intended to combine scientific and technical expertise (from GSI and its partners) with the skillsets from social sciences.

6. Expected Outputs of Project

- a) Map of key stakeholders related to the GSI National Coastal Change Assessment.
- b) Report on current, and potential, use of the two coastal mapping products among stakeholders.
- c) Report on impact to climate related societal challenges (including coastal adaptation and mitigation) and policy interaction.
- d) Recommendations for future to enhance the impact of the two coastal products to key stakeholders with a focus on local authorities.
- e) Cost-Benefit Analysis report (if possible).

The Fellow will learn how policy is developed and implemented, how scientific and research outputs are used, and how organisations like Geological Survey Ireland can provide the role of translating high quality research to practical tools for local and national government and other key stakeholders.

Geological Survey Ireland will benefit from embedding social science expertise within a technical programme and improve engagement with external, non-technical stakeholders.

7. Working Arrangements

Ideally would be hosted in GSI offices (Citywest and/or Booterstown Hall), but flexible offsite/working from home arrangements available. Possibly fieldwork, conferences etc

8. Expected Timeline

Approximately 12 months full-time

9. Contact Details

Xavier Monteys, Team lead for GSI Marine and Coastal Unit Dr Aoife Braiden, GSI Research Manager
