



## Academic Contributions

### Natural Capital (NC)1 Vision:

**“We have transport and network services that are resilient to the impacts of flooding and extreme weather”**

### Natural Capital (NC)3 Vision

**“We have soils and woodland that are resilient to the impacts of climate change”**

## Towards Quantification of Blanket Bog Ecosystem Services to Water (QUBBES)

Dr Raymond Flynn, Queen's University Belfast

### NI Evidence Report Risks & Opportunities Addressed

**Ne1:** Risks to Species and habitats due to inability to respond to changing climatic conditions

**Ne3:** Risks and opportunities from changes in agricultural and forestry productivity and land suitability

**Ne4:** Risks to soil from increased soil aridity & wetness

**Ne5:** Risks to natural carbon stores & carbon sequestration

**Ne8:** Risks of land management practices exacerbating flood risk

### Collaborating Organisations:

University College Dublin, Ohio State University, National University of Ireland, and Dundalk Institute of Technology

### Funders

Environmental Protection Agency and Queen's University Belfast

### Implementation Timeline

By end of 2019

### Research Project

Investigate the impact of flooding on the stability of small single and multi-span masonry arch bridges. Research undertaken will quantify climate change impacts, including projected increases in heavier and more frequent rainfall events and bridge scour risk. It will also consider the impact of adaptation measures and relevant maintenance regimes already underway. Results will be disseminated to advise long-term renewal programmes for bridge maintenance, earthworks and embankment.