

# Control of diffuse agricultural pollution and management of trans-boundary waterways in Ireland and Northern Ireland

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## Project Overview



**Background:** Brexit is likely to trigger significant changes in the agri-food sector between Ireland, Northern Ireland and Great Britain, including shifts in market conditions, industrial organisation, and policy. This may have a disproportionate impact on the island of Ireland due to its highly integrated agri-food sector and shared ecosystems. Resultant challenges, if not properly addressed, have the potential to negatively affect current provision of ecosystem services in agriculture, and undermine the overall sustainability of the industry.

Many of the island's ecosystems are transboundary in nature, including numerous waterways. New regulatory regimes may result in different standards across a single water catchment area; changes to the management of a catchment in Northern Ireland can exhibit positive or negative externalities in Ireland, and vice versa. A challenge for policy makers and farmers alike will be to determine how to weather upheavals in agri-environmental policy, practice and trade so that farmers on both sides of the border can collaboratively continue to thrive while also sustaining and improving existing land and waterway management practices.

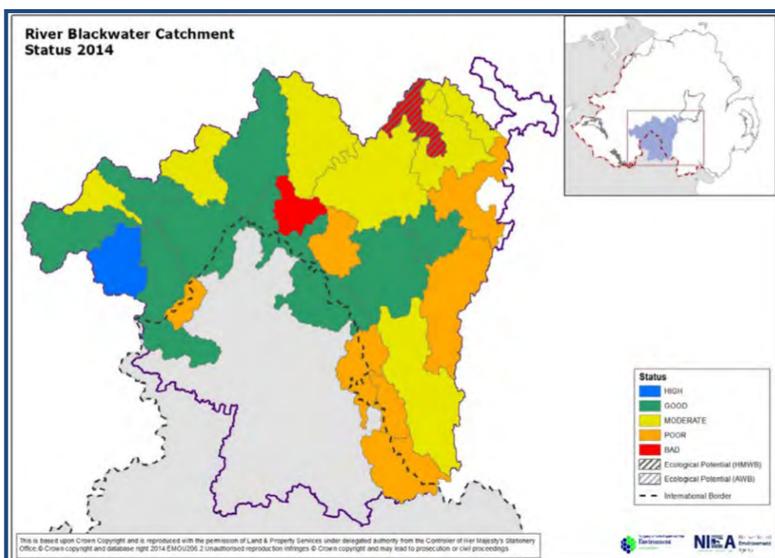
**Project aim:** This project considers the potential impact of diverging agri-environmental policy on agricultural land use and trans-boundary waterway management on the island of Ireland. Using a range of qualitative methods (interviews, focus groups, case studies), I am investigating the various factors that affect farmers' land use and waterway management practices on the island of Ireland, and to what degree these factors are considered in the policymaking process.

## Key Research Questions

- **Question 1:** Within Ireland and Northern Ireland, who are the key players involved in developing agri-environment strategies and policies?
- **Question 2:** What factors influence Irish and Northern Irish farmers' decision-making processes around land use and waterway management?
- **Question 3:** Are there key differences in the agri-environment policymaking processes in Ireland and Northern Ireland? If yes, how do these impact the management of the island's shared waterways?



## Case Study: The Ulster Blackwater Catchment



The Ulster Blackwater River has a cross-border catchment and is one of the major inflowing rivers of Lough Neagh in Northern Ireland. It flows through agricultural land and several large urban areas, including Monaghan, Armagh, Dungannon and Portadown. The now disused Ulster Canal also travels through County Armagh and County Tyrone.

The river is a traditional salmon fishery that has been impacted by channelisation and eutrophication. According to Jordan *et al.* (2008), agricultural soils are sources of acute mass phosphorus transfer to the river system during storm events. Chronic phosphorus transfers from other sources compound eutrophication during non-storm periods.

The Blackwater catchment will serve as a case study for this research. While I will be exploring the above questions in a whole-island context, I will use research conducted in this catchment to illuminate some of the practical challenges faced in collaborative waterway management on the island of Ireland.

Jordan P., Ward C., Arnscheidt J., McCormick S. (2008) Eutrophication in the Blackwater River Catchment, Ireland. In: Meire P., Coenen M., Lombardo C., Robba M., Sacile R. (eds) Integrated Water Management. NATO Science Series, vol 80. Springer, Dordrecht

## Interested in taking part? Get in touch!

- I will be conducting research in Ireland and Northern Ireland between November 2019 and September 2020. If your work relates to catchment management, agri-food policy or farming more generally and you are interested in speaking to me about the issues highlighted here, please get in touch: [a.a.attorp2@newcastle.ac.uk](mailto:a.a.attorp2@newcastle.ac.uk)