



Water Company Catchment Management and Agriculture Policy post-Brexit

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Thanks

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- the people we interviewed.

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Indepen, Eunomia, WWF-UK and the sponsors of the project do not necessarily agree with the views summarised in this report.

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Introduction

Water companies use a variety of catchment management approaches where they are cost-effective to achieve the outcomes required by their customers and regulators. Schemes include farm business advice, investment in pesticide and nutrient management equipment, financial incentives, and contracts for specific controls on seasonal cropping, land management and pesticide application. The outcomes include reduced flood risk, improved water quality (both in the environment and at customers' taps) and more resilient water supply.

The schemes have been developed against a backdrop of EU policy, notably the Water Framework and Drinking Water Directives, and farm subsidies under the Common Agriculture Policy. Brexit will change this context. The agriculture sector will face a new policy regime that reflects the UK Government's approaches to trade, regulation, movement of labour and subsidy. Under 'post-Brexit' policy, farmers will face a new set of influences on their decisions on land use and on the agreements they make. Farmers' responses could have significant effects on the health of the water environment and the ability of the UK to meet obligations under its statutory River Basin Management Plans, either directly or through changes in their appetite to engage in agreements to contribute to environmental outcomes.

Water companies face two types of effect of post-Brexit agriculture policy.

Firstly, land management practices, arising from farmer responses to the new policy and markets, could affect "background" quality conditions. Improvements in drinking water quality, the condition of rivers and the quality of bathing waters could be reversed. Secondly, as farmer requirements and their appetite to engage with water companies change, so too will the future attractiveness and effectiveness of catchment schemes to the water companies.

These two sorts of effect could create operational, financial and reputational risks and opportunities for the water companies.

This project has considered post-Brexit agriculture and trade policy options and tested their potential effects on water company operations. We have explored the drivers of farm business behaviour to evaluate their potential effects on water company catchment programs and the health of natural capital in catchments.

This interim report outlines our key findings in terms of

- current trends in the agricultural sector that may already be having their effects
- the potential impacts of Brexit
- opportunities and risk for policymakers.

The project will conclude in February with two final outputs, a report for the sponsoring companies and one for policymakers.

The project

This interim report is based on: the results from analysis of studies that were undertaken in 2017 to evaluate the effects of Brexit on the agriculture sector and the environment, and views garnered from a series of regional stakeholder workshops and engagements with government agencies and regulators.

We considered two time horizons: short term trends in the agriculture sector for the next two to three years; and the longer term out to 10 years. Both are indirectly and directly affected by Brexit and the associated uncertainty about future policy and regulation.

In the stakeholder workshops, we consulted farm business advisers, agronomists, academics, investors and environment managers, to test assumptions about existing trends and what changes we might expect to see under different post-Brexit policies.

Appendix 1 describes the research we conducted, and Appendix 2 lists the organisations that took part in the stakeholder workshops.

Current trends

This section outlines some current trends in agriculture and about farm business decisions in England that could affect aspects of the water environment. Their relevance to specific regional contexts was captured in reports from the regional stakeholder workshops.

Based on reports into the effects of Brexit on the agriculture sector¹, farmer surveys, conversations with catchment advisors, policy statements from government and general agriculture market trends, over the next two to three years it is likely that

- farm debt will remain high
- capital investment will decline
- labour availability will be tighter
- input costs will rise
- farmers' business confidence will remain low
- subsidy levels will be maintained in sterling terms
- output prices will follow world markets
- world prices for cereals will remain historically low
- the number of dairy farms will continue to fall
- oil seed rape cropping will continue to fall
- the amount of land used to grow crops for biofuel will remain unchanged

¹ See Appendix 1

- autumn/winter sowing of cereals will decrease
- new domestic and European regulations will apply but their impact will depend on what happens to enforcement and advisory effort.

In these circumstances, we are likely to see the following effects on farm decisions and behaviours

- no significant change in the mix of farm business models
- a reduction in the number of separate farm businesses
- a fall in the adoption of voluntary environmental stewardship measures
- a drop in the take-up of farm support grants that require matched funding
- a decline in the number of farmers signing long-term stewardship agreements
- more dairy farm intensification
- investment in sustainable intensification and farm infrastructure mainly in high-performing farms
- high levels of interest in the efficient use of nutrients and pesticides
- static rate of uptake of environmental stewardship advice
- slight increase in autumn/winter cover cropping
- increased attractiveness of short-term incentives to manage for environmental stewardship
- appetite for fertilisers from secondary sources will increase slightly
- demand for crop irrigation water will remain broadly unchanged.

Some of the effects of these developments on the water environment will be

- a continued increase in pollution incidents from agriculture, particularly from slurries
- a fall in nitrate leaching
- static use of pesticides and mineral fertilisers, unless affected by non-government schemes
- no improvement in the ecological status of waters affected by agricultural pressures.

Possible effects of Brexit

From our research and the workshops, we identify the following Brexit-related primary drivers of farm business decisions

- value of the pound
 - input prices
 - output commodity prices
- value of, and criteria for, subsidy payments
- immigration policy and its workforce consequences
- market access.

Our work identified some secondary drivers (i.e. changes that may occur in response to the impact of primary drivers) of farm business decisions as follows

- a new agriculture payment regime would have differential effects on land prices and rents: the effects could vary between areas focusing predominantly on food production and those where the outcomes include a wider range of public goods
- direct payments to farmers are linked to regulatory compliance, particularly for tenants: a reduction in the former could necessitate a weakening of the later
- reduced labour availability may lead to a rise in labour costs: this could trigger a change in farm type to control costs.

Our work leads to five emerging narratives of how future Brexit agriculture policy could affect farmer behaviour.

- Pressures from uncertainty or regulatory burden drive consolidation in the sector. This could have a positive impact on freshwater outcomes as larger farm businesses are more able to invest in infrastructure, agri-environment schemes and precision farming.
- Improved market opportunities or rent reductions lead to increased production. This would stimulate the use of more or different pesticides and fertilisers providing a boost for farm incomes but potentially endangering catchment management programs and raising water company costs.
- Agri-tech investment or external tariffs lead to a longer growing seasons. This might be via greater use of poly-tunnels with the attendant risks of increased agricultural water abstraction and chemical loading in catchments.
- Shifts in subsidy targets and objectives lead to differentiated food production and natural capital areas with corresponding intensification and deintensification and knock on effects in catchments.
- The status quo, of poorly aligned funding and weak regulatory enforcement, continues to distort farm business decision-making which would perpetuate negative environmental impacts.

Key findings

The findings from the work to date are a synthesis of the views of those to whom we spoke. Neither the sponsors of the project nor the authors of the report necessarily agree with them. The key findings from the workshops and interviews so far are as follows.

- Existing trends in the farming sector are leading to changes that will increase pressure on the water environment.
- Uncertainty about Brexit will contribute to these trends, which will continue or become stronger under most post-Brexit policy scenarios.

- Short-term tenancies are increasing in response to Brexit-induced uncertainty and this could continue after Brexit. The effects may vary but are not generally considered to be likely to be positive for the water environment.
- Farm business consolidation will be more likely, though this will vary regionally and by commodity, with a likely increase of tenancy or shared farming arrangements.
- The effect of the changes will differ by farm type and area. Our research indicated different responses from different categories of farm:
 - highly productive and efficient farms in good farming areas - likely to be most able to weather policy changes, post Brexit or otherwise;
 - farms in less-favoured areas/high-nature value areas - likely to receive continued support to farm in an environmentally-sensitive way;
 - a “squeezed middle” where farm incomes are most at risk from changes to subsidy objectives. These farms do not fall into high nature value areas, and nor are they high performers and their income will be strongly affected by any change to subsidy.
- Consequences for water companies will depend on the distribution of these types of farm in relation to water supply sources and catchment pinch points, where changes to farm practice will have the greatest impact.
- Actions by water companies that focus on reducing farming input costs will provide an effective lever to influence farm behaviour in ways that are beneficial to water companies.
- The role of water companies as service providers (and their third party partners) and the government agencies involved in regulation, must to be clear if land manager trust in catchment management schemes is to be maintained.

Opportunities and risks

There is already a risk that water companies may not develop new catchment management schemes or continue with existing ones and this is exacerbated by possible post-Brexit policy responses. The reasons underlying the existing risk include the following.

- The EA has constrained the continuation of schemes in the Water Industry Natural Environment Program (WINEP) in the upcoming water company price review (known as PR19).
- Justifying catchment schemes to Ofwat under the TOTEX² regime is problematic. This is due to the long-term nature of the benefits and the difficulty in establishing firm cause-effect relationships between interventions and outcomes.
- The resources of the EA and the Rural Payments Agency to monitor and enforce compliance with land use regulation are constrained.

² TOTEX – standing for Total Expenditure – is one of the concepts that Ofwat uses to assess efficiency. In theory it encourages companies to consider solutions with relatively high operating costs to be considered on an equal basis with capital solutions.

This project set out to help water companies and government identify policy sweet-spots in the delivery of freshwater outcomes that will facilitate efficiency, productivity and growth across in the rural economy. The following is a preliminary view of opportunities for better outcomes for water customers, farmers, taxpayers and the water environment.

- An Agriculture White Paper is due in summer 2018, with a Bill likely in the Autumn. The proposals could include water-related outcomes that encompass water quality and quantity as a strong focus of the public goods.
- The soon to be released 25-year environment plan could consider a new publicly supported financing facility to encourage investment that protects and enhances natural capital.
- In land use regulation and enforcement, the boundaries are not clear for delivery and compliance in catchments between local, regional and national authorities, regulators and operators. Clarification of local governance around integrated delivery could be addressed in the 25-year environment plan.
- Improving the clarity and alignment of who co-ordinates investment decision making in catchments would deliver better outcomes, from mitigating flood risk and improving natural capital, with lower private and public costs.³
- The 2019 review of the Water Framework Directive by the European Commission provides the opportunity for its targets as a justification for future water company investment to be re-evaluated and justified.
- The BEIS Clean Growth Strategy could provide opportunities for water companies in delivering forestry objectives. It could be worth exploring whether forestry investment can be justified by water companies, which are already involved in grassland reversion projects. This would be a significant change.
- Water treatability could be a consideration in the chemical approval process – not currently the case. Some chemicals are less risky because conventional water treatment or natural processes can render them less harmful. There is a risk to the water companies from the future use of chemicals and changes in pesticides.

Points for discussion

We will explore the findings, opportunities and risks in the final reports for sponsors and policy makers. Some of the areas we will explore are noted as points for discussion.

- How are water companies positioned to working in catchments and at what point are they no longer the most efficient or effective body to deliver water outcomes?
- There is an opportunity for organisations, including water companies, to pay farmers for the wider social good provided by well-managed agriculture. It would depend on the enforcement of regulation to secure confidence that basic legal environmental practice and compliance is in place. How should this be resourced?

³ Indepen *Catchments if you can* Report <http://indenpen.uk.com/case-studies/catchments-if-you-can/>

- Long-term (beyond 5 years) water company investment in catchment management schemes has become more difficult. How can regulatory barriers be overcome to facilitate a more coordinated effort between water companies and the agriculture sector? What incentives are needed?
- Can post-Brexit agriculture policy facilitate farmer collaboration and how can government schemes better enable this to benefit the water environment?
- Could the role for a strong independent catchment regulator be explored? Would the public, the third or the private sector be the best model?
- Could a warning system, such as that used by SEPA in Scotland, or civic fines be used for regulatory breaches by land managers?

Appendix 1 – summary of research

The research results we reviewed included

- farmer surveys
- conversations with local catchment advisors
- policy statements from government, for example
 - European Commission *Omnibus regulation - Agricultural rules*
<http://www.consilium.europa.eu/en/policies/cap-simplification/omnibus-regulation-agriculture/#>
 - Defra *Farming rules for water – getting full value from fertilisers and soil* November 2017
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/663360/farming-rules-for-water-policy-paper.pdf
 - Defra *Water Abstraction Plan 2017* December 2017
<https://www.gov.uk/government/publications/water-abstraction-plan-2017>
- general agriculture market trends reports.

Several recent reports have created scenarios to illustrate how a Brexit deal, and associated policy responses, could affect farm businesses. Three of the most recent and significant of these reports were:

- Land Use Policy Group *Potential Implications of leaving the EU for UK agriculture and the rural environment* September 2017 (<https://ieep.eu/publications/potential-implications-of-leaving-the-eu-for-uk-agriculture-and-the-rural-environment>)
- AHDB *Brexit Scenarios – An impact assessment* October 2017 (https://ahdb.org.uk/brexit/documents/Horizon_BrexitScenarios_11oct17.pdf)
- Cumulus Consultants report for the RSPB *The potential impacts of Brexit for farmers and farmland wildlife in the UK* October 2017 (<http://www.cumulus-consultants.co.uk/documents/The-potential-impacts-of-Brexit-for-farmers-and-farmland-wildlife-in-UK-23.10.17.pdf>)

Appendix 2 – organisations and agencies engaged

Farm business advisers

- Agricultural Industries Confederation
- Central Association of Agricultural Valuers (CAAV)
- Rural and Business Specialists Ltd
- Catchment Sensitive Farming

Farm business representatives

- The National Farmers Union – regional and national offices
- Country Land and Business Association (CLA) - regional and national offices
- Tenant Farmers Association

Investors

- Barclays
- HSBC

Conservation and environment managers

- Norfolk Rivers Trust
- RSPB
- Westcountry Rivers Trust
- Bristol Avon Catchment Partnership

Academics and consultants

- The Institute for European Environmental Policy
- Imperial College London
- Agra CEAS

Government

- The Drinking Water Inspectorate
- The Environment Agency
- Ofwat