

## Summary: Intervention & Options

<b>Department /Agency:</b> Defra	<b>Title:</b> Impact Assessment of cross border regulations for the Solway-Tweed river basin district (Floods Directive transposition).	
<b>Stage:</b> Final	<b>Version:</b> 1.0	<b>Date:</b> 26 March 2010
<b>Related Publications:</b> Impact assessment of transposing the Floods Directive in England and Wales. Flood Risk Management (Scotland) Act impact assessment		

### Available to view or download at:

<http://www>.

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### What is the problem under consideration? Why is government intervention necessary?

The Floods Directive has been transposed in all of England, Scotland and Wales except for the Scottish part of the Solway-Tweed river basin district. The Scottish legislation applies only to entire River Basin Districts as defined under the Water Framework Directive and as the Solway-Tweed lies partly in England it could therefore not be included. Additional regulations are now required to extend the legislation to the Scottish part of the River Basin District and to formalise co-operation and between cross-border authorities so as to complete transposition and avoid infraction proceedings.

### What are the policy objectives and the intended effects?

To complete transposition of the Floods Directive by legislating for flood risk management authorities either side of the Scottish border to co-operate in producing flood risk assessments, maps and plans, an overarching aim, at transnational scale, of the Directive. By making regulations for the cross-border catchments, flood risk management in the Solway Tweed river basin district will be co-ordinated, consistent and the risk of actions in one country exacerbating flood risk in the other will be minimised.

### What policy options have been considered? Please justify any preferred option.

1. Apply the Scottish system to the entire Solway-Tweed river basin district (RBD)
2. Apply the English system to the entire Solway-Tweed RBD
3. Retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, extend the Scottish system to catchments entirely within Scotland and introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments.
4. As (3) but with a fully integrated planning process with a single set of plans.

### When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects?

This cross-border policy will be reviewed as part of the Floods Directive implementation as a whole in 2016 and with interim reviews after each product is completed.

### **Ministerial Sign-off** For final proposal/implementation stage Impact Assessments:

***I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.***

Signed by the responsible Minister:

..... Date:

## Summary: Analysis & Evidence

<b>Policy Option:</b>	<b>Description:</b>
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<b>COSTS</b>	<b>ANNUAL COSTS</b>	Description and scale of <b>key monetised costs</b> by 'main affected groups' [Intentionally blank - costs are of a relatively small order compared with the transposition costs for all of England (and Wales) and Scotland which were included in the respective transposing legislation impact assessments].			
	<b>One-off</b> (Transition) <span style="float: right;"><b>Yrs</b></span>				
	£				
	<b>Average Annual Cost</b> (excluding one-off)				
	£		<b>Total Cost (PV)</b>	£	
Other <b>key non-monetised costs</b> by 'main affected groups'					

<b>BENEFITS</b>	<b>ANNUAL BENEFITS</b>	Description and scale of <b>key monetised benefits</b> by 'main affected groups'			
	<b>One-off</b> <span style="float: right;"><b>Yrs</b></span>				
	£				
	<b>Average Annual Benefit</b> (excluding one-off)				
	£		<b>Total Benefit (PV)</b>	£	
Other <b>key non-monetised benefits</b> by 'main affected groups'					

Key Assumptions/Sensitivities/Risks
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Price Base Year	Time Period Years	<b>Net Benefit Range (NPV)</b> £	<b>NET BENEFIT (NPV Best estimate)</b> £
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What is the geographic coverage of the policy/option?					
On what date will the policy be implemented?					
Which organisation(s) will enforce the policy?					
What is the total annual cost of enforcement for these organisations?	£				
Does enforcement comply with Hampton principles?	Yes/No				
Will implementation go beyond minimum EU requirements?	Yes/No				
What is the value of the proposed offsetting measure per year?	£				
What is the value of changes in greenhouse gas emissions?	£				
Will the proposal have a significant impact on competition?	Yes/No				
Annual cost (£-£) per organisation (excluding one-off)	<table style="width: 100%; border: none;"> <tr> <td style="width: 25%; text-align: center;">Micro</td> <td style="width: 25%; text-align: center;">Small</td> <td style="width: 25%; text-align: center;">Medium</td> <td style="width: 25%; text-align: center;">Large</td> </tr> </table>	Micro	Small	Medium	Large
Micro	Small	Medium	Large		
Are any of these organisations exempt?	<table style="width: 100%; border: none;"> <tr> <td style="width: 25%; text-align: center;">Yes/No</td> <td style="width: 25%; text-align: center;">Yes/No</td> <td style="width: 25%; text-align: center;">N/A</td> <td style="width: 25%; text-align: center;">N/A</td> </tr> </table>	Yes/No	Yes/No	N/A	N/A
Yes/No	Yes/No	N/A	N/A		

<b>Impact on Admin Burdens Baseline</b> (2005 Prices)		(Increase - Decrease)
Increase of £	Decrease of £	<b>Net Impact</b> £

Key: Annual costs and benefits: Constant Prices (Net) Present Value

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

### 1. Introduction

1. This impact assessment considers the options for transposing the Floods Directive in the Solway Tweed river basin district, specifically in the catchments lying solely in Scotland and in the cross-border catchments shared with England.
2. The Floods Directive has already been transposed in England & Wales and most of Scotland with impact assessments reviewing the cost and benefits for all territory within these countries. Given the preferred option explored here makes similar arrangements for the Solway Tweed river basin district, but with formalised co-operation and co-ordination particularly in the cross-border catchments, the marginal cost is considered to be relatively modest. Economists have therefore determined that there is no justification for this impact assessment to be formally signed off, but instead the effectiveness of the policy will be reviewed as part of a review of implementation of the Floods Directive more broadly.

### 2. Existing legislation

#### Scotland

3. In Scotland, the Scottish Environment Protection Agency (SEPA) is the competent authority for implementing the Floods Directive. SEPA has overall responsibility for carrying out an assessment of flood risk across in Scotland, identifying areas of potential significant flood risk ('potentially vulnerable areas'), producing flood hazard and flood risk maps, and producing the 'national' level flood risk management plan.
4. Local authorities and Scottish Water are responsible authorities with specific roles in managing flood risk. The Scottish Ministers, together with SEPA and the responsible authorities have a duty to co-operate with one another and to exercise their flood risk related functions with a view to reducing overall flood risk.
5. Local authorities are responsible for preparing local flood risk management plans to supplement the national plan. The local plan will set out a summary of the objectives and measures relevant to that local plan district, and a description of how the measures are to be implemented, including a detailed timetable for implementation.

#### England

6. In contrast with Scotland, in England there is no distinction between national and local flood risk management plans. But there is a difference between 'national' sources of flood risk and 'local' sources of flooding. The Environment Agency (EA) has an overview role and is responsible for flood risk from main rivers, the sea and reservoirs whereas lead local flood authorities (LLFAs) are responsible for all other forms of flood risk which are principally local in nature.
7. Both EA and LLFAs have a duty to prepare preliminary flood risk assessments (maps and reports), identify areas which are at significant risk of flooding ('Flood Risk Areas'), prepare flood risk and flood hazard maps and prepare a flood risk management plan for

each 'Flood Risk Area'. In particular the plan must set objectives for the purpose of managing the flood risk and propose measures for achieving those objectives.

8. In practice the flood risk management plan will be an amalgamation of existing and developing flood risk plans covering different sources of flooding, and these will be drawn together as co-ordinated plans to present to the Commission.

### **3. The Solway Tweed River Basin District**

9. The Solway Tweed was formally identified as a River Basin District under the Water Framework Directive. Many of the catchments in the Solway Tweed RBD lie solely within England or in Scotland and only a limited number of catchments have the potential to cause cross border flooding issues, most obviously the river Esk and lower end of the Tweed.
10. In terms of coastal flooding most flood risk management measures are self contained within England or Scotland respectively, in terms of their location and zone of influence. Fluvial processes inland will affect sedimentation and therefore coastal erosion, and any progression of tidal barrage proposals in the Firth will require cross-border co-ordination in flood risk management policy.
11. So other than the river Esk and lower Tweed catchments that straddle the border, the majority of the Solway Tweed River Basin District can clearly be divided as either within England or within Scotland.

### **4. Floods Directive requirements**

12. Before considering the options for transposing in the Solway Tweed RBD it is necessary to consider any restrictions imposed by the Floods Directive.
13. Article 8 of the Floods Directive requires Member States to produce flood risk management plans setting objectives and measures to reduce flood risk. However, it does not require one plan per river basin district, rather it allows for a single plan or set of plans co-ordinated at the level of the river basin district. This degree of flexibility would enable us to produce separate plans north and south of the border at an appropriate local or catchment level and co-ordinate these in order to make them available to the Commission.

### **5. Options considered**

14. Considering the nature of the Solway Tweed and the existing legislation within England and Scotland, the options for transposition are therefore:
  - (1) To apply the Scottish system to the whole of the Solway-Tweed river basin district;
  - (2) To apply the English system to the whole of the Solway-Tweed river basin district;
  - (3) Retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, extend the Scottish system to catchments entirely within Scotland and introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments; or
  - (4) As (3) but with a fully integrated planning process resulting in a single set of plans.
15. The advantages and disadvantages of each of these options are considered below.

## **(1) Apply the Scottish system to whole of Solway-Tweed river basin district**

### **Advantages**

- The vast majority of the Solway-Tweed river basin district lies within Scotland, so the administrative burden would be consistent with the share of flood risk.

### **Disadvantages**

- Quite a different system operates in Scotland compared with England with a distinction between national and local plans for the Floods Directive.
- Lead local flood authorities whose jurisdiction crosses into the Solway Tweed RBD might need to apply both the Scottish and English systems.

## **(2) Apply the English system to the whole of the Solway-Tweed river basin district**

### **Advantages**

- This would be consistent with the approach taken in transposing the Water Framework Directive

### **Disadvantages**

- Again there are significant differences between the English and Scottish systems, and potential difficulties with some local authorities needing to apply both systems.

## **(3) Retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, extend the Scottish system to catchments entirely within Scotland and introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments.**

16. This would involve separate planning processes with general coordination, but no decision making occurring across the border – and a set of plans pulled together for EC reporting purposes.

### **Advantages**

- This option fits well given that many of the catchments lie solely within England or Scotland and can be accommodated by existing (or extending the Scottish) legislation
- It would address separately the limited number of catchments with the potential to cause cross-border flooding

### **Disadvantages**

- Some work involved in setting up a cross-border advisory group and co-ordinating maps and plans.

## **(4) As above but with a fully integrated planning process with a single set of plans.**

17. This would mean a properly integrated planning process with single plans published for public consultation based on joint approaches and regulations. A cross-border group would determine significant risk areas in cross-border catchments

### **Advantages**

- This would appear to result in the most cohesive reporting to the Commission and would minimise the risk of infraction, but would require complete agreement between cross-border authorities on the measures and objectives in this single set of plans

## Disadvantages

- There may be substantial difficulties if cross-border groups are left to determine (rather than just advise on) significant risk in cross-border areas without much more work on developing joint methods leading to joint regulations on the form and content of the Preliminary Flood Risk Assessment.
- Because a substantial area of Scotland with significant flooding issues lies in the Tweed cross-border catchment, this would need to either adopt the Scottish approach, or attempt to develop a UK wide approach. The latter is not feasible in the time available.
- Similar difficult issues arise when thinking about including maps and setting objectives and measures within the remit of cross-border groups.

18. The preferred option is therefore (C); to retain the English system in catchments entirely within the English part of the Solway-Tweed RBD, to extend the Scottish system to catchments entirely within Scotland and to introduce a duty to co-ordinate assessments, maps and plans for the cross-border catchments.

## 6. Benefit-cost analysis

19. The estimated cost of implementing the Floods Directive in England, Wales and Scotland has been calculated in separate impact assessments - see box 1 below. These assessments considered the cost of implementing the Directive in all respective territories even though in practice Scottish implementation at present does not include the Solway Tweed RBD. Neither impact assessment estimated the benefits in monetary terms.

20. The additional cost of transposing the Directive in the Solway Tweed under the preferred policy is therefore negligible by comparison and primarily concerns administrative arrangements including setting up a cross-border advisory group and the Environment Agency and SEPA co-ordinating the resulting plans.

### **Box 1: Cost of Scotland implementing the Floods Directive**

First flood risk management cycle (2009 to 2015) = £78.1million

Ongoing annual running costs = £13.6 million

Costs are total costs of implementing the Directive minus the cost of amending the statutory process and local authority functions, and amending the enforcement responsibilities for the Reservoirs Act 1975.

Benefits have not been quantified.

The figures are not discounted or presented in net present values terms.

### **Cost of England and Wales implementing the Floods Directive**

First flood risk management cycle (2009 to 2015) = £6.26 to 6.66 million

Ongoing annual running costs = (Not estimated)

Other costs are included in local flood risk management impact assessment, but are not directly attributed to the Floods Directive.

Benefits have not been quantified, but costs are discounted and presented in net present value terms.

### **Specific impact tests**

23. This policy proposal will have similar, though smaller, impacts to the transposition of the Floods Directive in England, Scotland and Wales. Implementation in the Solway Tweed river basin district is unlikely to impact on any of the criteria listed below. It should enhance flood risk measurement and management policy and make better use of resources.

### **Competition**

24. No impact on competition. The objectives and measures set in the Flood Risk Management Plan will inform decisions on investment in flood management infrastructure, but this will be subject to existing procurement procedures.

### **Small firms – no impact**

25. No impact - the work demanded by the Directive will be carried out by large public organisations, the Environment Agency and lead local flood authorities.

### **Legal aid**

26. The policy measure introduces no new criminal sanctions or civil penalties.

### **Sustainable development**

27. The Floods Directive complements current flood risk management policy which supports sustainable development.

### **Health impact**

28. None is anticipated.

### **Race, disability, gender equality and human rights**

29. No impact is anticipated from transposition and implementation of the Floods Directive.

### **Rural proofing**

30. Existing flood risk management policy will apply.

## Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

**Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.**

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	Yes	No
Small Firms Impact Test	Yes	No
Legal Aid	Yes	No
Sustainable Development	Yes	No
Carbon Assessment	Yes	No
Other Environment	Yes	No
Health Impact Assessment	Yes	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	Yes	No
Rural Proofing	Yes	No

## Annexes

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