

FLOOD RISK MANAGEMENT (SCOTLAND)

BILL

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The Flood Risk Management (Scotland) Bill seeks to reduce the adverse consequences of flooding for human health, the environment, cultural heritage and economic activity. This briefing considers current responsibilities and legislation related to flood risk management and recent government and parliamentary work in this area. It introduces the Bill and summarises selected stakeholders' views.

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KEY POINTS

- The Flood Risk Management (Scotland) Bill was introduced to Parliament on 29th September 2008 and seeks to introduce a framework to reduce the adverse consequences of flooding for human health, the environment, cultural heritage and economic activity.
- The Bill seeks to transpose the EU Floods Directive, updates current legislation on flooding and amends legislation related to reservoirs in Scotland.
- The Bill seeks to place a duty upon Ministers, the Scottish Environment Protection Agency (SEPA) and responsible authorities to exercise their flood risk management function with a view to reducing overall flood risk.
- SEPA, together with responsible authorities, are required to prepare flood risk assessments, flood risk and flood hazard maps, and flood risk management plans.
- The assessment, maps and plans must be consistent with characterisations of river basin districts and river basin management plans required under the Water Environment and Water Services (Scotland) Act (asp 3) 2003.
- The Bill provides a revised statutory process for flood protection schemes (FPS) and links FPSs, development plans and Flood Risk Management Plans.
- The Reservoirs Act 1975 (c.23) is amended so that SEPA takes over from local authorities as the relevant authority and enforcement authority for reservoirs.
- A new system for reporting incidents that could affect reservoir safety is introduced.
- The cost of setting up the framework (i.e. assessment, maps and plans) is estimated to be just under £90 million. This estimate does not include the cost of implementing flood risk management measures to reduce flood risk (such as building a flood wall or creating a wetland).
- Many recommendations of the RAE Committee Inquiry on Flooding and Flood Management are covered (or covered in part) by the Bill. Annex 1 makes a direct comparison between the provisions of the Bill and the RAEC Inquiry recommendations.

INTRODUCTION

The Flood Risk Management (Scotland) Bill was introduced to the Scottish Parliament on 29th September 2008. The Rural Affairs and Environment Committee has been designated lead committee for consideration of the Bill at Stage 1. The Bill seeks to reduce the adverse consequences of flooding for human health, the environment, cultural heritage and economic activity. It aims to do so by establishing a framework for 1) assessing flood risk, 2) mapping flood hazard and flood risk, and 3) developing flood risk management plans. The Bill transposes the EU Floods Directive into Scots law and replaces the Flood Prevention (Scotland) Act 1961 (c.41). It also amends the Reservoirs Act 1975 (c.23), transferring responsibility for the Act to SEPA and introducing a new system for reporting incidents which could affect reservoir safety. The Bill relates to flood risk management and does not address the consequences of flooding.

This briefing focuses on current responsibilities and legislation related to flood risk management and recent government and parliamentary work in this area. It discusses the provisions of the Bill, together with consultation responses and the Parliamentary Inquiry recommendations. A more general introduction to flooding can be found in the SPICe briefing [Flooding](#) (Edwards, 2007).

CURRENT ROLES AND RESPONSIBILITIES

Currently property owners and landowners have primary responsibility for flood protection for their property. A range of other bodies have responsibility for different aspects of flood risk management. The current responsibilities of the main organisations involved in flood risk management are set out below:

- **Scottish Ministers** have responsibility for national policy on flood alleviation and provide resources to public bodies to carry out their functions. They are also responsible for confirming Local Authority Flood Prevention Schemes under the Flood Prevention (Scotland) Act 1961 (c.41).
- **Local Authorities** are responsible for planning control, constructing and managing flood prevention and defence schemes, the assessment and maintenance of watercourses and co-ordination of authorities in the event of a flood.
- **Scottish Environment Protection Agency (SEPA)** disseminates flood warnings, provides flood risk and flood mitigation information and regulates the impact of flood defences (and other engineering works on rivers) on the water environment.
- **Scottish Water** maintains water and drainage infrastructure, and manages the discharge of water from drains. Scottish Water is concerned with flooding that originates from the sewerage system. Scottish Water also manages the storage and release of water in supply reservoirs.
- **Flood Liaison and Advice Groups (FLAGs)** are non statutory advisory groups of public and private sector representatives, convened by local authorities to share concerns and knowledge and to provide advice on a wide range of planning and other flooding issues in an informal setting.

The Scottish Government (2008a) states that, at present, there are “grey areas where it is unclear who is responsible for dealing with floodwater, whatever its source”. The RAE Committee [Inquiry report](#) also stated that “there must be clarity about where responsibilities lie and where the boundaries of those responsibilities begin and end” (Scottish Parliament Rural Affairs and Environment Committee, 2008).

One of the aims of the Flood Risk Management (Scotland) Bill is therefore to “establish a clear framework of responsibility, with duties and powers defined so that each organisation involved knows exactly what is required”.

CURRENT LEGISLATION AND GUIDANCE ON FLOODING

The main legislation currently relevant to flood risk management in Scotland is set out below:

- **The Flood Prevention (Scotland) Act 1961 (c.41)** gives local authorities permissive and discretionary powers to take action to prevent flooding on non-agricultural land. Other work is only permitted with the promotion of a flood prevention scheme.
- **The Sewerage (Scotland) Act 1968 (c.47)** (as amended by the Water Industry (Scotland) Act 2002 (asp 3) and the Water Environment and Water Services (Scotland) Act (asp 3)) places a duty on Scottish Water to provide such public sewers and public sustainable urban drainage systems as may be necessary for effectively draining its area of domestic sewerage, surface water and trade effluent.
- **The Reservoirs Act 1975 (c.23)** sets safety requirements to prevent escapes of water from reservoirs. It imposes duties on “undertakers” who own, operate or use large reservoirs. The Act regulates maintenance, inspection and structural changes to large raised reservoirs. Relevant authorities are required under the act to maintain registers of information about large reservoirs.
- **The Roads (Scotland) Act 1984 (c.54)** allows relevant authorities to carry out works to protect roads from flooding and empowers authorities to drain roads and prevent surface water from flowing onto them.
- **The Agriculture Act 1970 (c.40)** and the **Environment Act 1995 (c.25)** give SEPA a variety of responsibilities in relation to flooding; including discretionary powers for the provision of flood warnings for Scotland.
- **The Flood Prevention and Land Drainage (Scotland) Act 1997 (c.36)** amended the 1961 Act such that the powers to cleanse, repair and maintain watercourses became statutory requirements rather than discretionary powers.
- **The Town and Country Planning (Scotland) Act 1997 (c.8)** as amended places controls on new development and the preparation of development plans. Flood prevention schemes under the 1961 Act are considered to be development, and therefore require planning permission. Secondary legislation requires that SEPA is consulted if a proposed development is likely to result in an increase in the number of buildings at risk of flooding. If SEPA advise against planning permission, Scottish Ministers must be notified, and could call the application in for their own decision.
- **Scottish Planning Policy (SPP) 7 and Planning Advice Note (PAN) 69** provide national guidance on addressing flood risk in development planning.
- **The Water Environment and Water Services (Scotland) Act 2003 (asp 3)** transposes the EC Water Framework Directive (2000/60/EC) into Scots law. The requirements of the Flood Bill and the WEWS Act must be consistent and co-ordinated.
- **The Water Environment (Controlled Activities) (Scotland) Regulations 2005 (CAR)** have been made under the WEWS Act. Amongst other provisions they require the construction of most flood defences to be authorised by SEPA.

The Scottish Government has stated that “much of this legislation is now outdated and does not reflect changes to the way that government and local services are delivered in Scotland” (Scottish Government 2008a).

THE EU DIRECTIVE ON THE ASSESSMENT AND MANAGEMENT OF FLOOD RISKS (2007/60/EC)

The European Directive on the Assessment and Management of Flood Risks (the Floods Directive) entered into force in November 2007, and must be implemented by Member States by November 2009. The main purpose of the Directive is to establish a framework for the assessment and management of flood risk to reduce the consequences of flooding on human health, the environment, cultural heritage and economic activity.

The Floods Directive requires member states to: Identify a competent authority with overall responsibility for implementation of the Directive and responsible authorities to ensure effective flood risk management planning. The competent authority will be required to undertake the following actions:

1. Produce **preliminary flood risk assessments** by December 2011: These create a national picture of flood risks, which includes consideration of climate change. They provide the information required for a strategic approach to flood risk management that targets those areas at greatest risk from floods.
2. Produce **flood hazard and risk maps** by December 2013: These maps must be produced for those areas identified as being at significant flood risk. They are used to increase public awareness, inform investment decisions, and support the production of flood risk management plans.
3. Produce **flood risk management plans** by December 2015: These will coordinate flood management objectives and measures across large catchments, or groups of catchments, and set the framework within which measures are delivered or planned for at a local level. The plans are expected to address all phases of the flood risk management cycle, in particular, flood prevention, protection and preparation.
4. **Review and update** the assessments, maps and plans every 6 years.

The Flood Risk Management (Scotland) Bill requires Scottish Ministers to report each year on the action taken to secure compliance with the EU Floods Directive. This report may be incorporated into the annual report on the WEWS Act 2003 (asp 3) which details compliance with the EU Water Framework Directive.

THE SCOTTISH PARLIAMENT RURAL AFFAIRS AND ENVIRONMENT COMMITTEE INQUIRY ON FLOODING AND FLOOD MANAGEMENT

In September 2007 the Scottish Parliament Rural Affairs and Environment Committee (RAEC) agreed to carry out an inquiry into "Flooding and Flood Management". The remit of the inquiry was to examine Scotland's current and future vulnerability to flooding and consider how flooding should best be managed in the future. Written evidence was received from 65 respondents, and oral evidence was taken at 6 meetings in January and February 2008. The [Inquiry report](#) was published in May 2008 and made 26 recommendations (Scottish Parliament Rural Affairs and Environment Committee, 2008).

The RAEC report was debated in Parliament on 26 June 2008 (Scottish Parliament, [2008](#)). On the same day, the Scottish Government published its response to it (Scottish Government [2008c](#)). The recommendations relevant to the Bill are discussed in detail below, where they are compared with the provisions of the Bill and any associated consultation response. Annex 1 provides a direct comparison of the RAEC recommendations and the provisions in the Bill.

SCOTTISH GOVERNMENT CONSULTATION ON THE FUTURE OF FLOOD RISK MANAGEMENT IN SCOTLAND

In February 2008 the Scottish Government launched a consultation on "[The Future of Flood Risk Management in Scotland](#)". The consultation document sought views on subjects relating to planning and preparing for flooding, as well as key Bill provisions (Scottish Government 2008a). It requested responses on:

- Transposing the EU Floods Directive
- Creating a framework for a sustainable, catchment focused approach to flood risk management
- Reforming current legislation covering flood protection and prevention
- Simplifying the approach to developing and implementing measures to manage flood risk
- Setting out proposals to transfer responsibility for enforcement of the Reservoirs Act 1975 (c.23) in Scotland from local authorities to a single enforcement authority

The Scottish Government ([2008b](#)) published a report which analyses the 143 responses received as well as the discussion from the workshops and public meetings held as part of the consultation. The report states that:

“...the general consensus across the consultation was that the proposals contained within the flooding bill consultation paper are a significant step towards ensuring more effective and sustainable flood management across Scotland.”

However, considerable concern was expressed about funding and expertise necessary for implementation of the Bill. The consultation responses are discussed in more detail below.

THE FLOOD RISK MANAGEMENT (SCOTLAND) BILL

This section details the provisions of the Bill and compares them with responses to the Government consultation and the RAEC Inquiry recommendations. The Flood Risk Management (Scotland) Bill seeks to reduce the adverse consequences of flooding for human health, the environment, cultural heritage and economic activity. All forms of flooding are covered by the Bill except where a flood is solely from the sewer system¹. Although ultimate responsibility for flood risk management still lies with the land owner, the Bill requires that specified public bodies are proactive in managing and lowering flood risk. The Bill makes provision in five main areas: 1) coordination and cooperation with respect to flood risk management, 2) assessment of flood risk and preparation of flood risk maps and plans (i.e. transposing the EU Floods Directive), 3) a revised statutory process for flood protection schemes, 4) changes to Local Authority and SEPA functions for flood risk management, and 5) amendments to the Reservoirs Act 1975 (c.23).

¹ A flood solely from the sewerage system is a flood containing sewerage which is caused solely by a blockage or failure of a sewer. Floods caused by overload of the sewer system due to high levels of rainfall are covered by the Bill.

1) COORDINATION AND COOPERATION WITH RESPECT TO FLOOD RISK MANAGEMENT

The Bill places a duty upon Scottish Ministers, SEPA and responsible authorities to “exercise their flood risk management function with a view to reducing overall flood risk”. Responsible authorities must exercise flood risk management functions and assist SEPA in preparing flood risk assessment, maps and plans. In doing this they must:

- a) have regard to the social and economic impact of those functions
- b) promote sustainable flood risk management
- c) raise public awareness of flood risk management
- d) contribute to sustainable development and
- e) co-operate with respect to these functions

The RAEC Inquiry recommended that SEPA be identified as the competent authority². SEPA is given the lead role at national level for flood risk management, but is not specifically named as a “competent authority” in the Bill. Some concern was expressed about SEPA taking the lead in the Government’s consultation, based on concerns that SEPA’s traditional role has been as a regulator and not as a co-ordinator and facilitator, as required by the Bill (Scottish Government, 2008b). Other concerns were related to the resourcing of SEPA in the required tasks, and about the potential conflict between flood risk management and existing duties, such as under the Controlled Activities Regulations (CAR) (Scottish Government, 2008b). CAR requires that SEPA regulate activities such as abstraction, impoundment and engineering activities on water courses.

Local authorities and Scottish Water are identified as responsible authorities, and there is provision to designate others in future. National Park Authorities, British Waterways and the Forestry Commission Scotland are named in the policy memorandum as possible additional responsible authorities. A number of other potential responsible authorities were suggested in response to the Government consultation on the Bill. These include Transport Scotland, Network Rail, National Farmers Union and Port Authorities.

The identification of Local Authorities and Scottish Water as responsible authorities, and the requirement for them to co-operate to manage floods risk, is in line with recommendation 8 of the RAEC Inquiry which states that bodies who will contribute to the delivery of flood management should be identified in statute and given a duty to collaborate.

Recommendation 4 of the RAEC Inquiry stated that the Scottish Government should ensure that the social and human costs, as well as the economic costs of flooding are included in the assessment of proposed flood risk management measures. The requirement that SEPA and responsible authorities have regard to the social and economic impact in the exercise of flood risk management functions addresses this issue. Flood Risk Management Plans must set objectives with regard to the costs and benefits of measures, including consideration of benefits to human health, the economy and the environment. However, there does not seem to be an agreed method by which social and human costs will be incorporated into flood risk management assessments, maps and plans.

² A competent authority is a term used within directives produced by the European Commission to describe a body which has been identified by a member state of the European Union as being responsible for specified functions related to a Directive.

Whilst the Bill requires that responsible authorities and SEPA must promote sustainable flood management (SFM), no definition of SFM is included in the Bill. The Government consultation document provided the following definition:

“Sustainable flood management provides the maximum possible social and economic resilience against flooding by protecting and working with the environment in a way which is fair and affordable both now and in the future”.

Seventy percent of respondents to the consultation document thought that this definition was “helpful”, although there was some disagreement about whether the definition was clear and whether the public would understand it. SEPA’s response to the consultation suggested that the definition be re-worked to provide a solid foundation for SFM decisions under the Bill.

2) ASSESSMENT OF FLOOD RISK AND PREPARATION OF MAPS AND PLANS

Part 3 of the Bill is primarily concerned with implementation of the EU Floods Directive. It addresses the requirement for Member States to prepare flood risk assessments, flood hazard and risk maps and flood risk management plans. Section 8 provides for the creation of flood risk management districts (FRMDs) which will be the geographical basis for the assessments, maps and plans. FRMDs will be the same as the River Basin Districts under the WEWS Act 2003 (asp 3). The RAEC Inquiry recommended that the catchment be adopted as the fundamental unit for flood management (recommendation 6). FRMDs broadly coincide with this. There will therefore be two FRMDs for Scotland, one for the majority of Scotland (the Scotland district), and a cross border district with England (Solway-Tweed district).

Flood risk assessments

For each FRMD SEPA must prepare a flood risk assessment by December 2011. This will include:

- A description of past floods that had significant adverse consequences, where similar future floods are probable
- A description of past floods that would have significant adverse consequences if they occurred in the future. This allows land use change to be accounted for
- An assessment of the potential adverse consequences of future floods
- Maps showing river borders, topography and land use
- A description of the potential adverse consequences to human health, the environment, cultural heritage and economic activity

According to the [policy memorandum](#) the flood risk assessments must consider all forms and sources of flooding. The flood risk assessment must be reviewed and updated where necessary every 6 years.

Flood risk maps and flood hazard maps

Based on the flood risk assessment, SEPA must identify “potentially vulnerable areas” within FRMDs. These are areas where flood risks exist or are likely to occur. Geographical areas around the potentially vulnerable areas must also be identified, and are termed “local plan districts”. Ministers must approve the potentially vulnerable areas and their associated local plan districts before SEPA prepares flood risk maps and flood hazard maps based upon them. Potentially vulnerable areas and local plan districts must be reviewed and if necessary updated every 6 years.

For each potentially vulnerable area, SEPA must prepare flood hazard maps and flood risk maps, by December 2013. Flood hazard maps must show the geographical areas that would be flooded, for floods with high, medium and low probability. These probabilities will be defined in secondary legislation. A number of stakeholders submitting written evidence arguing that these definitions must fit with SPP7 (e.g. SEPA and City of Glasgow Council). The maps must also provide information about the extent, depth and velocity of the flood water. There are some exceptions to this requirement including floods from groundwater sources, floods from sewerage systems, floods in coastal areas and high probability floods.

Flood risk maps must show the potential adverse consequences for each type of flood identified in the flood hazard maps. They must show the number of inhabitants that could be affected, the type of economic activity in the area, installations that may cause accidental pollution if flooded, protected (designated) areas or water bodies that could be affected. Flood hazard maps and flood risk maps must be reviewed and where necessary updated every 6 years, and in the first instance, by December 2019.

Section 16 of the Bill requires SEPA to “assess” whether alteration, enhancement or restoration of natural features such as floodplains, woodlands, and wetlands (i.e. natural flood management) would contribute to management of flood risk within a flood risk management district. This “assessment” does not require the implementation of natural flood management techniques. Nor does it create a presumption in favour of natural flood management techniques as recommended by RAEC Inquiry (recommendation 15). SE Link also pick up on this issue in their written response to the Bill. However, the explanatory notes state that such an assessment is over and above the requirements of the EU Floods Directive.

Flood Risk Management Plans

Section 23 of the Bill states that SEPA must prepare flood risk management plans for the potentially vulnerable areas in each flood risk management district. One plan per district must be submitted to Scottish Ministers by December 2015. The flood risk management plans will include the risk assessment and maps. They must also set objectives for the management of flood risks for potentially vulnerable areas and identify measures to achieve those objectives. SEPA must consider both structural (which involve carrying out measures on land) and non-structural (such as raising awareness of flooding, flood warning and development planning) measures to meet the objectives. The table below sets out the factors that SEPA must take into account when setting objectives and measures for the flood risk management plans.

• flood risk assessment	• conservation of nature
• costs of measures	• environmental objectives
• flood hazard map	• climate change
• benefits of measures to health, cultural heritage, economy and environment	• development plan for the district
• flood risk map	• land and water management
• navigation and port infra-structure	

Requirements for consultation and the publication of draft flood risk management plans are set out in section 25 of the Bill, and are similar to section 11 of the WEWS Act (asp 3). This is important since SEPA is required to co-ordinate the preparation of flood risk management plans with river basin management plans. SEPA is required to publish information about the preparation of flood risk management plans and must take into account responses from specified organisations and others who have responded. A draft plan must also be published. Views from specified organisations and others must be taken into account in the final flood risk management plan which is presented to Scottish Ministers for approval.

Flood risk management plans must be reviewed and updated every 6 years, and by December 2021 in the first instance.

Local Flood Risk Management Plans

Section 29 of the Bill requires that the lead (local) authority for each local plan district prepare a local flood risk management plan, which supplements the district flood risk management plan. The lead and other local authorities must co-operate with each other to prepare, review and publish the local flood risk management plan. These plans must include objectives for flood risk management and measures to achieve them (the supplementary part of the plan).

They must also include an implementation part, which consists of a timetable for implementation of measures, who is responsible for each measure and funding arrangement for the measures. The implementation part may include a flood protection scheme (FPS). The local flood risk management plans must be consistent with the district flood risk management plan. Local authorities must publish and consult on the local flood risk management plan in a similar way to that required of SEPA for the district flood risk management plan.

The Bill requires consideration of development planning when setting objectives for flood risk management plans. The policy memorandum states that there will be “two-way interaction between development planning and flood risk management planning” (p17). Scottish Ministers and every public body and office-holder must “have regard to” the district FRMP and the local FRMP. The policy memorandum also states that the expectation is for subsequent planning legislation to include a specific provision requiring local authorities to have regard to flood risk management plans when preparing development plans. The policy memorandum anticipates that a review of the Scottish Government’s planning guidance on flooding (i.e. SPP7 and PAN 69) will be considered in the light of the Bill. This addresses recommendation 18 of the RAEC Inquiry, that local authorities assess whether their flood risk assessment is compatible with their development and structure plans. However, the Bill does not go so far as to require that a full flood risk assessment is a prerequisite for planning permission for developments in a flood risk area.

Flood risk assessments, maps and plans will require considerable information and assistance from SEPA, local authorities, Scottish Water and other organisations. The Bill requires relevant bodies to provide and gather information and assist in the preparation and development of assessment, maps and plans. Scottish Ministers can determine whether such requests are reasonable if there is a difference of opinion. Respondents to the Government’s Bill consultation expressed concern about the availability and accuracy of information available to inform the flood risk management plans. Funding the gathering and collating of information was also of concern to respondents (Scottish Government, 2008b). However, the policy memorandum states that the Scottish Government will work to ensure that organisations involved in implementation of the Bill are adequately resourced.

Sewer Flooding

The EU Floods Directive provides for an opt-out for sewerage flooding. The inclusion of sewerage flooding in the definition of a “flood” means that it must be included in flood risk assessments and flood risk management plans. Local Authorities and Scottish Water are, according to the policy memorandum, “well placed to develop assessment and maps of sewerage flooding” (p14). However, there is provision in the Bill for an opt-out of mapping of sewerage flooding where it is considered that mapping of such flooding scenarios would be impractical or impossible. Sewer flooding would still need to be included in flood risk management plans.

As a responsible authority Scottish Water is given a duty to act to reduce overall flooding. This means that Scottish Water's investment programme (termed Quality and Standards) needs to take this new duty into account. The objectives of Scottish Water's investment programme are set by Scottish Ministers. Current objectives cover the period 2006-2014. The policy memorandum states that these objectives will "take full account of the new duty in relation to flood risk management". This is in line with the RAEC Inquiry which recommends that greater emphasis should be placed on pluvial flooding³ in setting future objectives for Scottish Water (recommendation 9). However, a number of responses to the call for written evidence on the Bill highlight the lack of clarity with respect to surface water management (e.g. Association of British Insurers and SEPA). Clarification on this is likely to be needed.

Advisory Groups

Each flood risk management district must have a flood risk advisory group. These "district advisory groups" will advise SEPA on preparation, review and update of documentation required in the Bill. SEPA must have regard to the advice. SEPA will determine the remit, membership and procedures for each district advisory group.

Districts must be divided into smaller geographical areas and SEPA must set up sub-district advisory groups, which will also advise on the preparation, review and update of documentation required in the Bill. SEPA, in consultation with relevant local authorities will determine the remit, membership and procedures of the sub-district advisory groups, and must have regard to the advice from these groups.

The requirement for advisory groups and for draft plans to be published and consulted on allows stakeholders and communities to input into the assessments, maps and plans. However, the provisions in the Bill provide for less stakeholder and community engagement than did the consultation document. Over half of the people who responded to the consultation document felt the proposals to support wider stakeholder involvement were unclear and did not go far enough (Scottish Government, 2008b).

Coordination with the WEWS Act 2003 (asp 3)

SEPA must ensure "appropriate consistency" between the flood risk assessments, maps and plans required under the Flood Bill and the characterisations of river basin districts and the river basin management plans prepared under the WEWS Act 2003 (asp 3). SEPA may integrate flood hazard and flood risk maps with characterisations of river basin districts, and integrate flood risk management plans with river basin management plans.

3) A REVISED STATUTORY PROCESS FOR FLOOD PROTECTION SCHEMES

Part 4 of the Bill allows (but does not require) local authorities to do anything that it considers appropriate to reduce the imminent risk of flooding which would have serious adverse consequences and will contribute towards the local flood risk management plan. This includes work within and outwith the local authority area and on both agricultural and non-agricultural land. The Bill provides for compulsory purchase of land for FPS.

Under the Bill, it will be possible to implement flood risk management measures without going through a statutory approval process where the local authority has agreement from relevant parties. A FPS will be required where agreement to carry out flood management work cannot be

³ Pluvial flooding is flooding that results from rainfall generated overland flow before the runoff enters any watercourse or sewer.

reached. This provides greater flexibility for the implementation of flood management measures than was previously available. Putting forward a FPS for approval will allow local authorities to use coercive powers and will result in deemed planning permission so that a separate planning application will not be required. Schedule 2 sets out provisions for notification of proposed FPS and the handling of the scheme in the event of both no objections to it and valid objections to it. Scottish Ministers will maintain a role in the process and have the facility to call-in any proposals for which there are outstanding objections from affected parties, including from other responsible authorities. This addresses recommendation 13 of the RAEC Inquiry that suggests a streamlined decision process for FPS, that Ministers remain involved in the process and that a system of deemed planning permission is implemented. However, it does not allow for different approval processes for different scales of FPS, as the RAEC Inquiry recommended.

4) CHANGES TO LOCAL AUTHORITY AND SEPA FUNCTIONS

The Bill requires local authorities to assess watercourses for potential flood risk, and “consider” whether taking action will reduce the flood risk. This effectively replaces statutory requirements under the Flood Prevention (Scotland) Act 1961 (c. 41) to cleanse, repair and maintain watercourses.

Section 53 of the Bill allows modification of “improvements order” made under the Land Drainage (Scotland) Act 1958 (c.36). An improvement order is where Scottish Ministers authorise owners of agricultural land to improve drainage or prevent or mitigate flooding or erosion to land. New improvement orders may still be made, but the Bill allows such orders to be varied or revoked on land where a FPS is proposed.

SEPA’s key new role under the Bill will be to facilitate and co-ordinate the assessments, maps and plans as set out above. SEPA will be given additional duties to provide advice to planning authorities and National Park authorities on the human health, cultural heritage, economic and environmental aspects of flooding as well as the advice they currently provide on flood likelihood and extent. SEPA is also required to issue flood warnings where it considers a flood is occurring or may occur in the near future. The Bill does not specify the timing or means of dissemination of the warning. There are discretionary powers for SEPA to expand the existing flood warning system where it considers it appropriate and effective. This provision provides a basis for SEPA to produce a national flood warning strategy to inform investment in flood warning and consider flood warning along with other measures in flood risk management plans. These provisions address recommendation 20 of the RAEC Inquiry, but are flexible and discretionary.

SEPA is given powers to enter land and buildings in carrying out its flood risk management duties, subject to relevant authorisation.

5) AMENDMENTS TO THE RESERVOIRS ACT 1975 (C. 23)

Part 7 of the Bill amends the Reservoirs Act 1975 (c.23). SEPA will take over from local authorities as the relevant authority and enforcement authority under the 1975 Act, for the whole country. Transitional arrangements are set out to deal with the hand over period. SEPA will also have the duty to enter land and check whether actions recommended by engineers related to reservoir maintenance have been carried out. The Bill enables Scottish Minister to make regulations requiring the reporting of incidents which may affect the safety of large raised reservoirs. A final amendment to the 1975 Act applies it to the Crown.

COSTS OF THE BILL

Given that the Bill provides a framework for the management of flood risk, the financial memorandum gives only “preliminary estimates” of the possible costs involved. Estimates are based on current efforts to manage flood risk across Scotland. The table below sets out the estimated costs associated with implementing the Directive, running local authority functions, and implementing amendments from the Reservoir Act. They do not include the capital or maintenance costs of any flood risk management measures that may be required.

<i>Organisation</i>	<i>Scottish Govt</i>	<i>Local Auths</i>	<i>SEPA</i>	<i>Scottish Water</i>	<i>National parks</i>	<i>Total</i>
Total cost of implementing the Directive for 1 st planning cycle, up to Dec 2015	4.26	36.48	22.23	12.7	0.42	76.09
Annual running costs of implementing the Directive after Dec 2015.	0.14	7.68	3.4	1.9	0.07	13.19
Annual running costs of local authority functions and the new statutory process	N/A	0.32	N/A	N/A	N/A	0.32
Initial set up costs for amendments to the Reservoir Act.	N/A	N/A	0.1	N/A	N/A	0.1
Annual running costs from amendments to the Reservoirs Act	N/A	-0.15	0.25	N/A	N/A	0.1
Total	4.4	44.33	25.98	14.6	0.49	89.8

* costs in million £'s

The costs in the table include costs of training and resourcing the necessary hydrological, modelling and flood risk management planning. Both the RAEC Inquiry (recommendation 5) and many of the respondents to the Government’s consultation raised concerns about the issue of lack of expertise in these areas. One of the main concerns raised in the Government’s consultation was the need for adequate resources to be made available to the organisations involved. The policy memorandum states that the Scottish Government will work to ensure that organisations involved in implementation of the Bill are adequately resourced.

Given the framework nature of the Bill and the inability to foresee what measures will be identified in flood risk management plans, the Bill does not publish clear criteria for prioritising the funding for the future of flood management, as recommended by the RAEC Inquiry (recommendation 11). Nor does the Bill embrace the three levels of funding set out in recommendation 12 of the RAEC Inquiry.

STRATEGIC ENVIRONMENTAL ASSESSMENT

A [strategic environmental assessment](#) on the consultation document reported in August 2008. This is required under the Environmental Assessment (Scotland) Act 2005, and is a systematic model for assessing the environmental effects of plans and programmes during their preparation, so that adverse effects can be mitigated before implementation. The key finding is that “there are no major incompatibilities between the contents of the consultation document and the SEA assessment framework as developed”. Indeed the proposals are expected to have positive effects across all SEA topics. However, since the Bill provides a framework for flood risk

management, specific projects and measures will need to be assessed individually. Where necessary any negative environmental effects will need to be identified and mitigated by the responsible authority before implementation.

The SEA report did identify one area where the Bill consultation document could be improved - that it might *actively promote* the capacity for restoration of ecosystem services, or enhancement opportunities that are offered by SFM. The Bill does not do this.

STAKEHOLDERS' VIEWS ON THE BILL

The Bill will affect a wide range of stakeholders and the general public. Views of selected stakeholders are set out in this section.

Local Authorities: A number of local authorities are concerned with the funding arrangement for the implementation of flood risk management measures that arise from the flood risk management plans. It is unclear whether such measures will be funded through the internal asset management process, via ring fenced funding from the government, through the block capital grant settlement, or via some other process. One local authority argued that the “key to the overall success of the Bill will be the demonstration that a fair and equitable system of allocating funding across the whole of Scotland has been adopted by the Government, based on genuine priority need rather than political allegiance”. Local authorities are also concerned about interim arrangement for the funding of Flood Protections Schemes between now and 2015 when FRMPs will be finalised.

Scottish Environment Link: SE Link have produced a [publication](#) that sets out three main concerns. First, that Sustainable Flood Management is not mentioned on the face of the Bill. Without this they argue the intention to initiate a new sustainable approach could be obscured. Second, the requirements for natural flood management are not clear and there is currently no presumption in favour of natural flood management techniques as recommended by the RAEC Inquiry. They argue that this requirement should be strengthened. Third, whilst the Bill provides a framework to develop assessment, maps and plans, it does not *require* any action be taken. SE Link argue that responsible authorities should be required to deliver measures specified in the FRMPs.

Scottish Environment Protection Agency: SEPA welcomes and is broadly satisfied with the overall content and direction of the Bill. It sees considerable opportunity to co-ordinate the requirements in the Bill with its functions under WEWS (Scotland) Act (asp 3). However SEPA has expressed concern in a number of areas:

- the current lack of alignment of funding streams from different organisations and processes involved in flood risk management
- that there is no duty to implement measures contained in the FRMPs
- the lack of capacity, recruitment and training of hydrologists in Scotland
- the need for clarification on SEPA's role in planning and flood risk. They suggest there is an opportunity to require Strategic Flood Risk Assessment of development plans
- that there is no mention of SUDS (sustainable urban drainage systems) in the Bill
- that more detail is needed and a statutory duty should be placed upon Scottish Water in relation to sewer flooding
- that “natural processes” rather than “natural features” should be assessed in flood risk management plans

- that under the general duty, SEPA and responsible authorities should have regard to environmental impact as well as social and economic impact of flood risk related functions
- that there is greater clarification on responsibilities for surface water management, and
- that there are appropriate interim arrangements in place between the passing of the Bill and the first flood risk management planning cycle in 2015

Scottish Water: Scottish Water is satisfied with the overall framework provided by the Bill and the collaborative approach. However, they express concern in four main areas. First, the omission of surface water management planning from the Bill. Second, that funding issues are potentially problematic and in particular, how the funding of relevant organisations will be linked. Third, that flood risk management should be co-ordinated properly with provisions under the WEWS Act, and finally, that a long term overall vision for the water environment is needed. This would include flooding and coastal erosion risk along with issues such as green roofs, grey water re-use, minimising impervious areas and proactive disconnection of surface water from combined sewers.

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ANNEX 1: RAE COMMITTEE RECOMMENDATIONS VS BILL PROVISIONS

The table compares the provisions in the Bill and the recommendations from the RAEC Inquiry into Flooding and Flood Management. It should be noted that at this stage there is still debate about the interpretation of different provisions set out in the Bill and exactly how they relate to the recommendations.

Inquiry recommendations	The Bill
R1: that the Scottish Government fully consider the recommendations contained within this report before introducing its bill on flooding and flood management.	
R2: that the Scottish Government set out the steps and funding that it considers necessary for mapping and addressing pluvial flooding.	<p>Partly covered by the Bill Pluvial flooding is included in the Bill. No specific funding mechanism is set out for funding pluvial flooding, although the policy memo states that Scottish Water’s investment programme for the period following 2014 will take full account of the new duty in relation to flood risk management. This would relate to sewer flooding.</p>
R3: that the Scottish Government conduct an assessment of the resilience of national infrastructure to potential storm surge events, especially given that storm surges and related coastal flooding are likely to increase in the future.	<p>Covered by the Bill The definition of “flood” in the Bill does not exclude storm surges or coastal flooding and therefore they are covered. An assessment of the resilience of national infrastructure would be covered by the requirement for assessments, maps and plans.</p>
R4: that the Scottish Government explore methods to ensure that the social and human costs, as well as the economic costs, of flooding can be included in future assessments of the value of proposed flood management measures.	<p>Partly covered by the Bill The definition of flood risk means that social and economic considerations are one of the elements to be included in flood management. Flood risk management plans must set objectives with regard to the costs and benefits of measures, including consideration of benefits to human health, the economy and the environment. The Government commissioned research, by Dundee University on “Exploring the Social Impacts of Flood Risk and Flooding in Scotland” which was published in April 2007. This shows the importance of social and human costs. However, there does not seem to be an agreed method by which social and human costs will be incorporated into flood risk management assessments, maps and plans.</p>
R5: that the Scottish Government establish how it can best contribute to building capacity in hydrological expertise.	<p>Not covered by the Bill There is no mention of how best to build capacity in hydrological expertise in the Bill. However, the costs in the financial memorandum include the training and resourcing of necessary hydrological, modelling and flood risk management expertise. Numerous stakeholders have expressed concern about this in their written evidence.</p>
R6: that the Scottish Government adopt the catchment as the fundamental unit for flood	<p>Covered by the Bill The fundamental unit for flood management is</p>

management.	Flood Risk Management Districts, which could, on a very large scale, be termed catchments. Sub-basins are also used in the Bill. They are likely to correlate to a smaller catchment area.
R7: that SEPA should be given the role of competent authority and take the lead at a national level in flood risk management, with suitable further safeguards to its independence.	Partly covered by the Bill SEPA is given the lead role at national level for flood risk management. No safeguards are specified to ensure the independence of SEPA in undertaking this role.
R8: that the bodies who will contribute to the delivery of catchment flood management plans should be identified in statute and given a duty to collaborate in order to deliver those plans.	Covered by the Bill Local Authorities and Scottish Water are identified as responsible authorities. There is provision to designate others. National Park Authorities, British Waterways and the Forestry Commission Scotland are named in the policy memorandum as possible additional responsible authorities.
R9: that the Scottish Government place significantly greater emphasis on pluvial flood management in setting future objectives for Scottish Water.	Partly covered by the Bill Naming Scottish Water as a responsible authority emphasises sewer flooding. The Policy Memorandum states that Scottish Water's future objectives will "take full account of the new duty in relation to flood risk management". However, in response to the call for written evidence on the Bill a number of stakeholders have noted a lack of clarity regarding responsibility for surface water management.
R10: that the Scottish Government set out a national, strategic "road-map" for investment in flood management that looks forward over a period of at least 25 years, with provision for updating every parliamentary session.	Not covered by the Bill The financial memorandum gives only "preliminary estimates" of the possible costs involved in implementing the Bill. Costs associated with implementing the Directive, running local authority functions, and implementing amendments from the Reservoir Act, i.e. costs associated with developing the assessment, maps and plans, setting up the groups are detailed. The cost of actual flood risk management measures/techniques is not included.
R11: that the Scottish Government publishes clear criteria for prioritising the funding for future flood management.	Not covered by the Bill The Bill does not include clear criteria for prioritising future funding for flood management.
R12: that needs-based funding should be provided to local authorities in order that they can contribute to catchment flood management plans and believes the funding method adopted should embrace three distinct levels of funding	Not covered by the Bill The Bill does not set out how flood risk management measures will be funded. Local authorities submitting evidence on the Bill have expressed concern about this.
R13: that the Scottish Government consider where there is scope for different approval processes to be established for different scales of flood management measure; that Scottish Ministers remain involved in the process of approving proposals for strategic flood prevention schemes; that a system of deemed planning consent associated with ministerial decisions is developed; and that the process of seeking approval for flood prevention schemes is streamlined to ensure speedier decision-making, including constraints on the time available for	Partly covered by the Bill Under the Bill, it will be possible to proceed with flood risk management measures without going through a statutory approval process where the local authority has agreement from relevant parties. Flood protection schemes (FPS) will be required to be taken through the statutory process where agreement cannot be reached. Putting forward a FPS will allow Local Authorities to use coercive powers and will result in deemed planning permission so that a separate planning

ministerial decisions.	application will not be required. Scottish Ministers will maintain a role in the process and have the facility to call-in any proposals for which there are outstanding objections.
R14: that the Scottish Government establishes further pilot studies to assess the contribution that natural flood management measures can make at a catchment scale.	Not included in Bill However, the Scottish Government has set up a Natural Flood Management Group who will consider these issues. The Group is made up of stakeholders including central and local government, Scottish Natural Heritage, the Scottish Environment Protection Agency, The Forestry Commission Scotland, National Farmers' Union Scotland, academia, Environment Link and the Scottish Flood Forum. The Government have initiated a project to develop a national research strategy on natural flood risk management measures.
R15: that the legislation creates a presumption in favour of natural flood management techniques being used as a part of each catchment plan – so that specific justification will be needed for any decision not to include such techniques. Guidance on the use of such techniques should be provided and revised in the light of increased knowledge about the effectiveness of natural flood management techniques at the catchment scale.	Not in the Bill Section 16 of the Bill requires SEPA to “assess” whether natural flood management techniques would contribute to management of flood risk within a flood risk management district. This “assessment” does not require the implementation of natural flood management techniques. Nor does it create a presumption in favour of natural flood management techniques.
R16: that local authorities ensure that, when planning permission is granted for new developments incorporating sustainable urban drainage systems, and where Scottish Water is not adopting the system, an appropriate maintenance regime is a requirement of the planning permission.	Not covered by the Bill
R17: that, given the importance of land-use management, the Scottish Government should ensure it has the power to require changes to land use for flood management purposes. Such a power would have to be accompanied by a provision for landowners to be compensated.	Covered by the Bill The Bill includes three provisions that enable changes to land use to be made for flood management purposes. 1) changes to “improvement orders” which are usually historical orders which allow drainage of agricultural land, 2) a process for Flood Protection Schemes (FPS), 3) compulsory purchase of land for FPS.
R18: that the Scottish Government require all local authorities to assess whether their strategic flood risk assessments are compatible with their development and structure plans and ensures that a full flood risk assessment is a prerequisite for the granting of planning permission for individual developments in areas at risk of flooding.	Partly covered by the Bill The Bill requires consideration of development planning when setting objectives for flood risk management plans. Scottish Ministers and every public body and office-holder must have regard to the district FRMP and the local FRMP. The policy memo also states that the expectation is for subsequent planning legislation to include a specific provision requiring local authorities to “have regard to” flood risk management plans when preparing development plans. However, the Bill does not go so far as to require that a full flood risk assessment is a prerequisite for planning permission for developments in a flood risk area.
R19: that the Scottish Government ensure that the	Not covered by the Bill

suggestion of enhanced reinstatement following flooding is communicated to representatives of the insurance industry and should seek to persuade the insurance industry that it is the best way to minimise the cost implications of further flooding incidents.	
R20: that the Scottish Government develops a flood warning strategy and, in doing so, addresses SEPA's other eight recommendations regarding flood warning.	Partly covered by the Bill The Bill requires that SEPA make warnings in relation to a flood. It sets out flexible and discretionary arrangements for SEPA to provide and operate flood warning systems, so that the recommendation may be addressed.
R21: that the Scottish Government ensures that SEPA has the necessary funding to enable it to collaborate with the Meteorological Office to provide an effective flood warning system for all types of flooding.	Not specifically covered by the Bill However, the financial memorandum includes £3 million which relates to the cost (over a number of years) of access to new datasets. Although this seems to relate to data for mapping requirements rather than flood warning requirements.
R22: that the Scottish Government take steps, including by making representations to the UK Government, to ensure that high-resolution radar coverage is established throughout Scotland to ensure that flood warning is as effective as possible.	Not covered by the Bill
R23: that the Scottish Government investigates the possibility of individual property vendors providing information on previous flooding incidents associated with a particular property to potential purchasers and requiring developers to provide flood risk assessments for new developments to potential purchasers.	Not covered by the Bill However, the Home Report will be introduced in Scotland on 1 December 2008 which will contain a question asking sellers to confirm whether the property has previously flooded.
R24: that the Scottish Government takes steps, together with SEPA, local authorities, the emergency services and the insurance industry, to consider how it can educate members of the public at risk of flooding of how they can best protect themselves and their property.	Covered by the Bill The Bill imposes a general duty on Scottish ministers, SEPA and responsible authorities to "act with a view to raising public awareness of flood risk."
R25: that the fire and rescue service be tasked with coordinating all flood-related rescue activities.	Not covered by the Bill
R26: that the Scottish Government explore ways of ensuring that the police service is able to act proactively rather than waiting for the situation to become an emergency.	Not covered by the Bill