

Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?

**Answer:** The proposals outlined will improve flood risk management, but the gaps and 'grey areas' which are not addressed in the proposals mean that the improvement will not be a great as might have been possible.

Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?

**Answer:** The proposals are enough to ensure that flood risk is addressed. A new duty to promote measures to alleviate flooding would require significant additional resources and funding.

### RESERVOIR SAFETY

Q30. Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?

**Answer:** Transferring the enforcement responsibilities under the Reservoirs Act 1975 to a single body is the only way to achieve a consistent approach throughout Scotland.

Q31. If so, should it be SEPA or another as yet unidentified body?

**Answer:** SEPA

*The Scottish Government propose that reservoirs be assessed as part of a preliminary flood risk assessment under the Floods Directive, and where it is considered that a dam breach would give rise to significant hazards, then the competent authority under the Floods Directive (SEPA) would be required to map that risk.*

Q32. Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?

**Answer:** The proposals for dealing with reservoir flood maps under the provisions of the Floods Directive are acceptable.

*The Scottish Government propose to amend the Reservoirs Act to extend the enforcement remit to ensure measures recommended in the interests of safety are carried into effect, within a specified timescale.*

Q33. Do you agree that enforcement powers be extended and post incident reporting included as an additional requirement?

**Answer:** Yes

**APPENDIX 1**

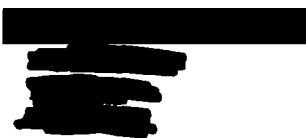
**APPENDIX 1**

*The Reservoirs Act in Scotland is currently silent on binding Crown bodies to comply; this legislative review presents the opportunity to consider this.*

**Q34. Views on crown application and any other comments?**

**Answer:** There should be no Crown immunity. The important factor is the water retaining capability of structures and this does not depend on ownership.

## Consultation on "The Future of Flood Risk Management in Scotland"



- 1 This is a personal response  
 2(a) Yes  
 (b) Yes – my response and name may be circulated - BUT NOT my address  
 3 N/A  
 4 Yes

Scottish – White : Age Range = 60-75 : No Disability

- Q1** The definition is clear and concise  
 Could be "fine tuned" later to include new technologies, weather patterns, new construction methods;  
 As well as changes in public perceptions
- Q2** Yes – as detailed in Box 2 by the FIAC.  
 However this does suggest some level of flooding may have to be acceptable  
 Surely this should not be acceptable., and certainly not for large housing developments and major  
 public utilities.  
 No development that may cause flood impact elsewhere can be acceptable.
- Q3** There has to be ONE National Statutory body; being properly funded and whose sole role is to Manage  
 and Coordinate and Prioritise : all risk assessments and works at National; Regional; and Local levels
- Q4** Yes – see Q3  
  
 There can be no place for a body such as S.E.P.A. whose different roles between Flood Control and  
 the protection of wildlife habitat; are in many instances in conflict.  
 It should be obvious that the roles of wild life and habitat protection ; as opposed to Flooding have  
 totally differing agendas !
- Q5** Only if there is a Statutory Body in authority – see Q3  
 This body should have an "umbrella" role overseeing all Local Plans and having access to the necessary  
 Funding to enable and ensure plans and projects are competently completed.
- Q6** SEPA should have no role !  
 A new body with a clearly defined and sole Flood Management agenda should be in place to coordinate  
 all Local and Regional needs to produce a coherent and robust strategy.
- Q7** In the first instance SNH should NOT be involved as they are perusing a potentially conflicting agenda  
  
 However the "NEW AUTHORITY" should involve Local Authorities; Forestry Commission; and indeed  
 any other bodies that the Authority identifies as being able to make a significant contribution ; which  
 would in their assessment offer practical advice and historical experience

**Q8** Basically as Q7

Should include ALL the Emergency Services ,and Rescue Services ( both Statutory and Voluntary) The NHS; and voluntary organisations such as salvation Army; Boy Scouts; so as to minimise damage to people, property and to effectively clear up all aspects of personal and social damage after any Flood. Given that Householders and Businesses would be affected, they also should be involved.

**Q9** Yes

**Q10** It is vital that all those who would be affected or involved in a potential flooding situation and all Communities must be identified and consulted , in order that they may be involved in the planning preparation.

**Q11** Yes The structure plan approval system has been tried and tested  
However SEPA should not be involved

**Q12** Yes Provided that the information, and the submissions are based on factual assessments and are not Politically motivated !

**Q13** Yes All drainage systems and water courses and routes must be included

**Q14** Planning Authorities must be compelled to consider FRMPs

SEPA should have no input into these considerations  
Currently many SEPA maps are not accurate as they are too general (more like a Post Code Lottery)  
- and indeed in our town they show an area at 170 metres above sea level as being at risk of flooding. !  
- This would take a flood of Biblical proportions before the area was in danger !  
- This makes the work of SEPA irrelevant; inaccurate and indeed a laughing stock

**Option 1**  
for This is the way forward for all large-scale Flood Risk Management Schemes and indeed makes the case for a single National Authority which can co-ordinate plans across all boundaries; Local and all other Authorities

**Q15** Under a single National Authority all aspects of FMRPs and planning considerations would statutorily be presented under one submission- hence automatically streamlining the approach.

**Q16** Only if it were of large scale and extends over many boundaries and Authorities.

**Q17** Following a flooding incident, and if and when a scheme is considered essential and urgent, then suitable approval must be a priority  
Priority mechanisms must be built into the approval process

**Option 2**

**Q18** In the event the definition in option 1 was not met; then this would be appropriate

**Q19** Should be aligned to the current planning application conditions and requirements

Q20 Certainly - as long as the FMRP requirements and planning requirements are aligned , and are within the same time scale

Q21 SEPA should be removed from any Flood management role !

The new National Authority responsible for Flood management would have not only its own experts "in house" but would have the ability to call upon the expertise of Consultants and others with the necessary technical knowledge and experience.

Q22 The decision having been made that a flood prevention was necessary and required, then planning and flood management, should be one single process

Q23 As there seems to be some doubt it is not possible to answer this.  
Each Local Authority should review their emergency plans and if necessary consult with COLA etc.

Q24 Streamlining the processes would be achieved if these were the responsibility of a new National Authority with umbrella responsibilities.

Q25 **Disband SEPA**

Simplify the procedures  
Publicise the new Authority and its plans

Q26 By placing all procedure under one new National Authority , this would rationalise and simplify all requirements. And would stop various bodies playing "politics" for their own agendas.

Q27 Yes. However these should be written in plain English, which should be jargon and "buzz word" free so that they are easily understood

Q28 Yes

Q29 Local Authorities should have an obligation to promote measure to alleviate flooding.  
The new National Authority should be seen to be actively supporting these initiatives.

#### RESERVOIR SAFETY

Q30 Yes

Q31 Certainly not SEPA ( see previous comments re too many agendas)  
The responsibility a new National Authority with a designated function

Q32 Ideally there should be a statutory duty for all reservoirs  
However smaller reservoirs (such as angling etc) could have delegated powers under an new Authority – but would have to consult

Q33 Yes

Q34 Crown applications would have to confirm to any new regulations and procedures.

**Inverclyde Council's response to the Scottish Government's Consultation on 'The Future of Flood Risk Management in Scotland'**

The 34 questions and the Council's responses are set out below

**Question 1:**

Do you believe the definition of Sustainable Flood Management (SFM) is helpful and of practical benefit to flood risk management?

**Answer**

What is defined as the SFM definition is actually a statement. It is too verbose

Suggest: - Sustainable Flood Management provides the best resilience against flooding

**Question 2:**

Do you think the definition is clear and simple to understand?

**Answer**

Yes, if it is augmented with the Flood Issues Advisory Committee's (FIAC) four further objectives :-

A social objective to enhance community benefit with fair access for everyone

An environmental objective to protect and work with the environment, with respect for all species, habitats, landscapes and built heritage

An economic objective to deliver at affordable cost with fair economic outcomes

A future generation's objective to allow for future adaptability, with a fair balance between meeting present needs and those of future generations.

**Question 3:**

Do you agree with the conclusion as set out in paragraph 3.17?

**Answer**

Yes, provided local authorities are fully integrated into all stages in the process from initial assessment to final implementation of flood risk management

Any additional funding implications for local authorities should be defined.

**Question 4:**

Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?

**Answer**

Yes provided local authorities retain their roles as responsible competent authorities for implementation of agreed policy within their own areas

**Question 5:**

Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?

**Answer**

Yes, this will rationalise flood risk management plans

**Question 6:**

Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?

**Answer**

SEPA, acting under ministerial guidance, should determine the lead authority in collaboration with the concerned local authorities.

**Question 7:**

Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?

**Answer**

Local flood risk management plans should be the responsibility of the relevant local authority with other responsible authorities having a duty to cooperate in the development of the plan

**Question 8:**

Which other bodies should be identified as responsible authorities?

**Answer**

Private land owners owning reservoirs in excess of a specific capacity

**Question 9:**

Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?

**Answer**

Yes, under SEPA/local authority lead

**Question 10:**

Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?

**Answer**

Yes, if stakeholders have a duty to cooperate within a SEPA/local authority's lead

**Question 11:**

Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?

Answer

Yes, this would ensure a uniform coordinated response at all stages

**Question 12:**

Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans? (AFRMP's)

Answer

Yes, this would align the AFRMP's with the principles of sustainable flood management

**Question 13:**

Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan (LRFMP)?

Answer

Yes, urban drainage can be significant and therefore should be included in the LRFMP

**Question 14:**

Should Flood Risk Management Plans (FRMP's) inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMP's?

Answer

Yes, development plans should accord with the FRMP's and the FRMP's should give guidance to developers

**Question 15:**

Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?

Answer

Yes, it would streamline the process, but it is inadvisable because it may lead to local considerations being overlooked



**Question 16:**

Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?

**Answer**

A scheme not requiring planning permission is unlikely to be of ministerial significance

**Question 17:**

Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?

**Answer**

The appointment of SEPA as the competent authority with the national remit for implementing the Floods Directive should speed up the process, but Ministers should hold the power to approve, modify or reject Area Flood Risk Management Plans (AFRMP's)

**Question 18:**

Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?

**Answer**

Local Authority processes should be taken forward within SEPA's guidance

**Question 19:**

What would be the appropriate timescales for notification and response?

**Answer**

Timescales should be consistent with the timescales for planning applications

**Question 20:**

Would it be appropriate for such a process to carry deemed planning consent?

**Answer**

No, refer response to question 15. Local Authority processes should be implemented within SEPA's guidelines

**Question 21:**

How should the issue of technical expertise and capacity to ensure the necessary technical standards are observed, be addressed?

**Answer**

The national coordinating authority could hold a register of flooding engineers capable of scrutinising technical proposals

**Question 22:**

Are there any additional alternatives to the options outlined above which would simplify procedures?

**Answer**

Partnership working between stakeholders within a formalised framework contract such as the Institution of Civil Engineers New Engineering Contract Professional Services Contract

**Question 23:**

Do you consider local authorities' powers are sufficient to take necessary action to avert danger to life and property?

**Answer**

Local Authority powers are sufficient. The Health and Safety Executive's powers should be noted.

Recharging by local authorities should also be considered. Thought should be given to assessing watercourses likely to cause flooding of agricultural land where such land can be used for flood attenuation purposes.

**Question 24:**

Do you agree that streamlining the Controlled Activities Regulations (CAR) and flooding/planning processes, can be managed through better guidance?

**Answer**

CAR requirements should be incorporated into both the River Basin Management Plans (RBMP's) and the Local Flood Risk Management Plans (LFRMP's). Thereby streamlining the process

**Question 25:**

Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?

**Answer**

All responsible bodies should have a duty to assist at all levels

**Question 26:**

Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government should consider?

Answer

The duties of all responsible bodies should be clearly defined

**Question 27:**

Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?

Answer

Yes

**Question 28:**

Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?

Answer

Yes

**Question 29:**

Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?

Answer

Yes it is enough, however, all responsible bodies should have a duty to cooperate, and where possible and practical reduce demand

## RESERVOIR SAFETY

### Question 30:

Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?

### Answer

Yes, this would lead to uniformity of standards

### Question 31:

If so, should it be SEPA or another as yet unidentified body?

### Answer

A separate reservoir body should be created under SEPA's authority with specific knowledge of reservoirs as reservoir problems can involve different engineering problems eg concrete dams, earth dams

### Question 32:

Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?

### Answer

No, a statutory duty should be imposed on reservoir owners

### Question 33:

Do agree that enforcement powers be extended and post incident reporting included as an additional requirement?

### Answer

Yes, note that the Environment Agency currently has a "Post-Incident Reporting for UK Dams: Incident Report Form"

### Question 34:

Views on crown application and any other comments?

### Answer

Owners of all reservoirs above a specific capacity should have a duty to comply with the act

**CONSULTATION ON THE FUTURE OF FLOOD RISK MANAGEMENT IN SCOTLAND**

**RESPONSE BY SOUTH AYRSHIRE COUNCIL**

- Q1. Do you believe the definition of Sustainable Flood Management is helpful and of practical benefit to flood risk management?**

It is agreed that the definition of SFM is helpful, and it is considered that the definition should be included in the proposed legislation.

- Q2. Do you think the definition is clear and simple to understand?**

Yes

- Q3. Do you agree with the conclusion as set out in paragraph 3.17?**

Paragraph 3.17 states that "the Scottish Government believes a single competent authority with a national remit for implementing the Floods Directive should be identified, and that the important role of local authorities in implementing flood defence works and engaging at a local level should be maintained". South Ayrshire Council recognise that it would be useful to have a single body looking at flood management on a strategic scale, but would be keen to continue to use local contacts of flooding locations and watercourses to provide assistance to those affected.

- Q4. Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?**

South Ayrshire Council agrees that there should be one overall competent Authority. In recognising the expertise that SEPA has in the areas of flood management and flood plain mapping they would seem to be the logical choice in heading up the national remit for implementing the Floods Directive.

- Q5. Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not, what alternative do you propose?**

It is noted that it proposed that local authorities will have the power to prepare a Local Flood Risk Management Plan in any area within their boundaries, but that they will have a new duty to prepare a LFRMP where a significant flood risk has been identified. If local authorities are to prepare these Plans, there will have to be some forum for bringing together neighbouring authorities, if required, SEPA, Scottish Water (if flooding from urban sewers is involved), landowners and any other appropriate parties, perhaps along the lines of the old Flood Appraisal Groups. It is noted that funding for flood risk management has been transferred to the local government settlement, and that future allocation of this finance will be based on significant flood risk in each authority.

**Q6. Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?**

The designation of the lead authority should be left to the partners, as there may be local conditions that mean that a particular authority is best placed to take the lead. Ministers could have the right to make a final decision where partners cannot agree.

**Q7. Do you agree that Local Authorities, Scottish Water, the Forestry Commission and SNH should be identified as responsible authorities?**

Agreed.

**Q8. Which other bodies should be identified as responsible authorities?**

None.

**Q9. Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?**

Agreed.

**Q10. Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?**

Yes. The establishment of stakeholder forums is to be encouraged.

**Q11. Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?**

Agreed.

**Q12. Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans.**

Agreed.

**Q13. Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?**

Yes. It is considered important that Scottish Water is included in the process, as the presence of sewage in flood water from surcharging sewers is a problem. It is acknowledged that the use of Sustainable Urban Drainage Systems (SuDS) will allow attenuation and infiltration, reducing peak flows.

- Q14. Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?**

It is considered to be sufficient that FRMPs inform the way that development plans are prepared.

- Q15. Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?**

Ministerial approval should be retained for flood schemes considered to be of national importance. The removal of the possibility of two public inquiries for the same scheme is to be welcomed.

- Q16. Should Ministerial confirmation be made necessary even when features of a scheme do not require planning permission?**

No.

- Q17. Is the present procedure for Ministerial confirmation satisfactory for this purpose or are there revisions e.g. to timescales which should be considered?**

The present procedure is satisfactory.

- Q18. Do you think that the option only to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?**

This is an interesting option, which could simplify procedures. However a local authority based process, in conjunction with the new national authority, could have implications in planning and technical resources. A further consideration is that funding for flood risk management is now to be included in the block grant. If this is not "ring-fenced" it may not be made available for flooding work.

- Q19. What would be the appropriate timescales for notification and response?**

Four weeks in each case.

- Q20. Would it be appropriate for such a process to carry deemed planning consent?**

Yes, although a system of checks and balances could be retained through the national flooding authority, and the fact that procedures will still be required to enable the Scottish Ministers to be involved in unresolved objections etc.

**Q21. How should the issue of technical expertise and capacity to ensure the necessary technical standards are observed, be addressed?**

It is recognised that not all local authorities have the technical expertise and/or resources to carry out the necessary work, so some pooling of experienced staff.

**Q22. Are there any additional alternatives to the options outlined above which would simplify procedures?**

None considered.

**Q23. Do you consider local authorities' powers are sufficient to take necessary action to avert danger to life and property?**

It is considered to be important that local authorities have sufficient powers to carry out emergency works to alleviate flooding where required. The ability to recover costs would be very useful. Could the use of Charging Orders be considered?

**Q24. Do you agree that streamlining the CAR and flooding/planning processes can be managed through better guidance?**

Agreed. It is considered that there is still some uncertainty over what works are, or are not, included under CAR. Streamlining of the planning/flooding/CAR process is to be encouraged, with concurrent applications the way forward.

**Q25. Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?**

No further comment.

**Q26. Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government should consider?**

No further comment.

**Q27. Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?**

South Ayrshire Council's biennial reports on flooding have always been accepted by the Scottish Executive/Government without adverse comments.



It is not envisaged that meeting prescribed form and content would be a problem.

- Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?**

The removal of the formal definition of "Flood Prevention Schemes" is to be welcomed, as this will give local authorities more flexibility when it comes to maintenance of watercourses. Of concern is the removal of the distinction between agricultural and non-agricultural land, which may extend the areas where local authorities will be thought to be liable for flood prevention. The provision of guidance on sustainable flood management will be useful.

- Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?**

It is considered that the powers placed on local authorities regarding flood risk Management should remain permissive, and not a duty.

- Q30. Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?**

The duties placed on local authorities with regard to enforcement of the Act are mainly administrative, and could be transferred successfully to a single national body.

- Q31. If so, should it be SEPA or another yet unidentified body?**

As with previous answers on flood risk management, it is considered that SEPA may not necessarily be the best body for this added responsibility, given their already extensive and varied remit.

- Q32. Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?**

The provision of reservoir inundation maps should be made a duty. This would benefit from a National approach.

- Q33. Do you agree that enforcement powers should be extended and post incident reporting included as an additional requirement?**

Agree that enforcement powers should be extended. The provisions in the Reservoirs Act 1975 fall short when it comes to giving the enforcement authority powers to carry out necessary maintenance in situations where the

owner is failing in his or her duty. It allows the appointment of a Supervising Engineer and recover of costs in that instance, but not in maintenance situations. This discourages action by local authorities. Post incident reporting should be added as a requirement.

**Q34. Views on Crown application and other comments?**

None of the reservoirs in the South Ayrshire Council area are currently in Crown ownership, but Crown ownership should not be grounds for exemption.

**Q1. Do you believe the definition of Sustainable Flood Management is helpful and of practical benefit to flood risk management?**

**Answer:** The definition is helpful and wide-ranging enough to include new techniques as they are developed.

**Q2. Do you think the definition is clear and simple to understand?**

**Answer:** As a high level definition, it is clear and simple; there will need to be further guidance on its application to actual flood risk management projects.

**Q3. Do you agree with the conclusion as set out above?**

**Answer:** Yes.

**Q4. Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?**

**Answer:** There should be a single, Scottish competent authority and SEPA appears best placed to undertake that role. However, SEPA is currently a regulatory body, and the organisation will have to adopt a different approach and attitude for the collaborative approach proposed.

**Q5. Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?**

**Answer:** A hierarchical approach to flood management planning is sensible combining the benefits of a high level, strategic approach with local knowledge. However, this approach must not be seen as 'top down', but rather a collaborative, 'bottom up' process.

**Q6. Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?**

**Answer:** Scottish Ministers should have the power to designate a lead authority within a local area – it may not be necessary to use that power other than in exceptional circumstances.

**Q7. Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?**

**Answer:** Yes.

**Q8. Which other bodies should be identified as responsible authorities?**

**Answer:** Network Rail. It is not explicit in the consultation that SEPA would also be a responsible authority. Bodies such as MoD, NHS, Scottish Enterprise should also be identified as responsible authorities.

**Q9. Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?**

**Answer:** Yes, though membership of flood risk management advisory groups should not be restricted solely to responsible authorities. Whilst the proposals specifically exclude the emergency response to a flooding event, it is important that flood risk management is treated holistically; flood risk management advisory groups should therefore also include those with a responsibility for emergency response.

**Q10. Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?**

**Answer:** The level (and coverage) at which such forums would be established is not clear, and therefore it is difficult to comment on the proposals. There is a great risk that such forums could be mis-used through self interest if the forums comprise individuals rather than organisations/groups.

**Q11. Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?**

**Answer:** Yes.

**Q12. Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?**

**Answer:** Yes.

**Q13. Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?**

**Answer:** Yes, integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan. However, neither the consultation proposals nor the 2nd Edition of Sewers for Scotland properly address the "grey areas" where responsibilities are unclear. Sewers for Scotland uses a 1 in 30 year return period; SPP7 requires a 1 in 200 year return period – there is, therefore, a clear assumption that urban flooding is acceptable.

**Q14. Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the Flood Risk Management Plans?**

**Answer:** There should be a requirement on planning authorities to show that they have regard to the Flood Risk Management Plans.

**Q15. Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?**

**Answer:** Yes. However, Option 2 is a preferable option.

**Q16. Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?**

**Answer:** No Comment.

**Q17. Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?**

**Answer:** No Comment.

**Q18. Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?**

**Answer:** Yes.

**Q19. What would be the appropriate timescales for notification and response?**

**Answer:** Timescales similar to those already established for development management would appear appropriate.

**Q20. Would it be appropriate for such a process to carry deemed planning consent?**

**Answer:** Yes, there should be integration into development management processes.

**Q21. How should the issue of technical expertise and capacity to ensure the necessary technical standards are observed be addressed?**

**Answer:** This is a serious issue which requires proper resourcing and additional revenue funding.

**Q22. Are there any additional alternatives to the options outlined above which would simplify procedures?**

**Answer:** No Comment.

**Q23. Do you consider local authorities' powers are sufficient to take necessary action to avert danger to life and property?**

**Answer:** Not in the case of addressing severe rainfall events where the impacts of overland flows from agricultural land can be significant and current legislation is unclear. There should be clearer powers for Local Authorities to require landowners (particularly of agricultural land) to maintain watercourses.

**Q24. Do you agree that streamlining the CAR and flooding/planning processes can be managed through better guidance?**

**Answer:** Yes.

**Q25. Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?**

**Answer:** The approach in Sewers for Scotland 2 is an inadequate response nationally to the challenges of climate change and future flood risk. It is likely to result in many new houses being flooded in future years if climate predictions become reality across the country. Sewers for Scotland 2 should be critically re-examined by Scottish Government, Scottish Water and SEPA to remove the inconsistencies between it and SPP7.

**Q26. Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government should consider?**

**Answer:** No comment

**Q27. Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?**

**Answer:** Yes; any direction from Scottish Ministers should however not add to the existing burden, but should be intended to simplify comparison of the biennial reports and their integration into the Preliminary Flood Risk Assessment(s).

**Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?**

**Answer:** The proposals outlined will improve flood risk management, but the gaps and 'grey areas' which are not addressed in the proposals mean that the improvement will not be as great as might have been possible. See responses to Q23 and Q25.

**Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?**

**Answer:** The proposals are enough to ensure that flood risk is addressed. A new duty to promote measures to alleviate flooding would require very significant additional resources and funding.

### **RESERVOIR SAFETY**

**Q30. Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?**

**Answer:** Transferring the enforcement responsibilities under the Reservoirs Act 1975 to a single body is the only way to achieve a consistent approach throughout Scotland.

**Q31. If so, should it be SEPA or another as yet unidentified body?**

**Answer:** SEPA

**Q32. Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?**

**Answer:** The proposals for dealing with reservoir flood maps under the provisions of the Floods Directive are acceptable.

**Q33. Do you agree that enforcement powers be extended and post incident reporting included as an additional requirement?**

**Answer:** Yes

**Q34. Views on crown application and any other comments?**

**Answer:** The Crown should comply with the legislation as any other undertaker has to however there are no Crown owned reservoirs within Dumfries and Galloway.

**Introduction**

David Crichton is a Chartered Insurance Practitioner, a visiting professor at two London universities and an Honorary Research Fellow at Dundee University. He lives in Perthshire and is a member of every Flood Liaison and Advice Group in Scotland.

He has 30 years experience in insurance and represented the Association of British Insurers on the steering committee of working parties which produced major reports on sustainable urban drainage systems<sup>1</sup> and also on reservoir safety<sup>2</sup>.

He also represented the Association of British Insurers in Scotland for several years and was a member of the NERC Earth Observation Expert Group and the DTi Earth Observation Programme Board.

**General comments**

The consultation paper is excellent and is to be welcomed. On the whole, the proposals are sensible and well considered.

**SUMMARY OF QUESTIONS**

**Q1. Do you believe the definition of SFM is helpful and of practical benefit to flood risk management?**

Yes

**Q2. Do you think the definition is clear and simple to understand?**

Yes

**Q3. Do you agree with the conclusion as set out in paragraph 3.17?**

Yes

**Q4. Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?**

I am concerned that SEPA may have difficulties in resolving conflicts of interest between Floods Directive and Water Framework Directive issues if they are the competent authority for both. I believe there is a strong case for an independent Flood Commissioner who could resolve conflicts where issues of public safety and human welfare conflict with WFD issues. There will also be cases where a proposed flood risk management solution causes substantial economic loss to individuals and businesses without a corresponding benefit. There needs to be some right of appeal to an independent person who has the power to resolve these issues.

For example, I know that Ministers will be well aware of one particular case where a flood defence scheme currently being proposed is causing serious concerns in the local business community by threatening access by customers to their premises. If the scheme goes ahead, businesses fear they would have to move out of the area with the loss of many jobs. In such cases a demountable barrier or flood gates might be a better solution. (The local authorities in this area appear to be unwilling to seriously consider natural flood management solutions.)

<sup>1</sup> CIRIA Report C521 "Sustainable urban drainage systems. Design manual for Scotland and Northern Ireland", London 2000.

CIRIA Report C522 "Sustainable urban drainage systems. Design manual for England and Wales", London 2000. ISBN 0 86017 522 7

CIRIA Report C523 "Sustainable urban drainage systems – best practice manual", London, 2001.

<sup>2</sup> Hughes, A; Hewlett, H W M; Samuels, P G; Morris, M; Sayers, P; Moffat, I; Harding, A; and Tedd, P. 2000 "Risk Management for UK Reservoirs." Construction Industry Research and Information Association (CIRIA) Research project report C542. London

On the other hand Ministers may also be aware that flood issues have been handled in the past by this local authority in such a way that many small businesses in this council's area can no longer afford flood insurance and may not be able to recover from another serious flood.

A Flood Commissioner could be tasked with the introduction of effective community consultation procedures.

**Q5. Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?**

Yes, subject to my comments above.

**Q6. Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?**

Left to the partners, subject to guidance and supervision from the Flood Commissioner.

**Q7. Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?**

Yes

**Q8. Which other bodies should be identified as responsible authorities?**

British Waterways, Crown Estates, National Parks and Scottish Building Standards Agency, to encourage them to become involved in the issues.

**Q9. Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?**

I am concerned about the comments in 3.34 that the flood risk advisory group would be a subgroup of the groups established under the 2003 Act. This clearly implies that they would be subordinate to WFD issues, that is to say in effect that flora and fauna are more important than humans. Surely Flood Advisory Groups should be of equal or greater importance, and should also involve key stakeholders in addition to the responsible authorities? Again the appointment of a Flood Commissioner could help to resolve the inevitable conflicts.

**Q10. Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?**

I think they need to be much tougher. For example, four local authorities have still not established Flood Liaison and Advice Groups despite the requirements of SPP7, and several others have allowed their FLAGs to become dormant. Perhaps there should be a statutory duty to establish FLAGs, meet regularly, and to invite all key stakeholders to attend. In addition, local authority staff will need more training on consultation and engagement issues and dealing with communities concerned about flooding risks. A Flood Commissioner could be tasked with ensuring that this happens and should provide an appeal mechanism where community interests have not been taken sufficiently into account.

**Q11. Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?**

Provided key stakeholders are involved.

**Q12. Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?**

Yes, on the advice of the Flood Commissioner.



**Q13. Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?**

Yes, but there is a lack of readily available data on the location of SUDS installations and sewers.

A number of local authorities have expressed concern to me about Sewers for Scotland 2 to the effect that the requirements of Scottish Water for adoption of SUDS may be too onerous and impractical especially for affordable housing developments. Certainly insurers should be concerned if a SUDS installation is not properly maintained, as this could lead to an increased flooding risk.

The insurance industry generally has very little knowledge about SUDS. In a survey of a large number of insurers carried out in 2005 with the assistance of the Association of British Insurers, 50% of respondents had never heard of SUDS and expressed concern over the presence of retention ponds, swales, and detention basins in proximity to housing. Many said they would change proposal form questions to ask about the presence of ponds or watercourses near the property and would apply premium increases in such cases. In February 2008, the Association of British Insurers telephoned a few leading insurers on these issues and afterwards they told the Rural Affairs and Environment Committee that (albeit based on a very small and unpublished sample) there should not be a problem in the future. Nevertheless, it is to be hoped that some efforts will be made by Scottish Water and the Scottish Government to address insurance and public concerns over the maintenance and design of SUDS installations. This could well be facilitated by the Flood Commissioner.

There remain a number of questions about SUDS:

1. Will airport operators seek to prevent SUDS within the 15km "consultation zone" of airports due to the bird-strike risk from habitat enhancement?
2. Are SEPA's Drainage Impact Assessment (DIA) guidelines suitable nationally? One council has already rejected them as not going far enough for local conditions.
3. Property values are escalating so much that it has been estimated that one particular SUDS pond would now be worth over £1.5m as building land. Can this be sustained? There is anecdotal evidence that many homeowners are paving over swales and filling in detention basins to create more parking spaces.
4. Climate Change projections indicate increased winter rainfall, up to 30% in some areas and existing SUDS designs do not take this into account adequately. (I have been told that Scottish Water allow for 10% but I understand this is for all contingencies not just climate change.) Are there any plans to change SUDS designs?
5. Should there be plans to map and take into account CSOs and SUDS schemes?

**Q14. Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?**

There should certainly be a stronger linkage. Perhaps insurers should be consulted about the availability and affordability of insurance in case of doubt. Again this is an area where a Flood Commissioner could have an important role.

**Q15. Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?**

Yes.

**Q16. Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?**

No.

**Q17. Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?**

I am concerned that there will be competing interests within local authorities for funding for flood risk management if this is not ring fenced. There will need to be some national standards for minimum levels of protection against which local authorities can be measured by the Flood Commissioner.

**Q18. Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?**

In principle, but see answer to Q17.

There is a shortage of expertise on natural and sustainable flood management and universities will need support to offer appropriate training courses, at least initially. Local authorities are used to dealing only with urban flood using civil engineering solutions. The change to a catchment approach including rural areas will require new skill sets. A Flood Commissioner with expertise in catchment flood management could provide guidance.

**Q19. What would be the appropriate timescales for notification and response?**

No comment.

**Q20. Would it be appropriate for such a process to carry deemed planning consent?**

No comment.

**Q21. How should the issue of technical expertise and capacity to ensure the necessary technical standards are observed, be addressed?**

When it comes to technical standards of service for flood protection, Scotland does not compare well with some other countries. The Netherlands and Japan use a 0.01% (10,000-year) minimum standard of service for coastal works and 0.5% (200-year) to 0.05% (2,000-year) protection for river systems. England uses a 0.1% (1,000-year) standard for the Thames.

By contrast, Scotland is still using only a 1% (100 year) standard for river and coastal flooding and a 30-year standard for surface water drainage.

***I recommend that Scotland should have a national debate on what standard of protection to adopt and in the meantime should increase the standard to 0.1% (1,000 years) for coastal works designed to protect the essential infrastructure identified in the National Planning Framework, with a view to ultimately increasing it further in such critical areas.***

At the very least there should be national guidance for standards of service for flood protection and for a benefit cost exercise to ensure that the public is getting the best value for money. Such an exercise should use the Dundee Tables to assess benefits<sup>3</sup> because these are based on the National Flood Insurance Claims Database, the biggest database in the world on the costs of flood events, including data from every major Scottish flood since 1993. Solutions should not be limited to hard engineering or natural flood management but should include more innovative solutions such as:

- Abandonment and relocation, for example on the Ontario model,
- Resilient design or construction of buildings, including floating buildings, and buildings on stilts,
- Use of approved temporary demountable flood protection systems,

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<sup>3</sup> Rather than the Multicoloured manual currently used which is based on a very small sample of English data.

- Change of use of buildings to uses which are less vulnerable to flood damage,
- Warning systems, shelters, and evacuation procedures.

The insurance template already followed by most planning authorities in Scotland refers to a maximum acceptable risk in terms of the 200 year return period. Any properties at a higher risk than that are likely to face growing problems with availability or affordability of cover. This will be aggravated as the insurance industry adopts an increasingly risk averse strategy following the 2007 floods in England.

**Q22. Are there any additional alternatives to the options outlined above which would simplify procedures?**

No comment.

**Q23 Do you consider local authorities' powers are sufficient to take necessary action to avert danger to life and property?**

They should have powers to repair private flood defences and to prevent private landowners from removing them without due cause.

**Q24. Do you agree that streamlining the CAR and flooding/planning processes can be managed through better guidance?**

No comment.

**Q25. Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?**

The current consultation paper on the National Planning Framework 2 proposes a suite of national developments which are considered to be essential for Scotland's spatial development. These include a replacement for the Forth crossing and the development of Grangemouth as a freight hub. The feasibility studies for the new crossing of the Firth of Forth were a good example of silo thinking by the previous administration. There was no consideration of climate change or the risk of flooding, for example. The type of bridge proposed will do nothing to protect the essential infrastructure at

- Longannet, Scotland's biggest non nuclear power station,
- Grangemouth, which supplies 40% of the UK's petrol and diesel,
- Major freight distribution hubs in the area, such as the huge depot in Falkirk which supplies a large supermarket chain in N. Ireland and N. England as well as the whole of Scotland.

None of these, not to mention at least 6,000 homes, are adequately defended against flood. A storm surge combined with high tide and heavy rainfall in the Forth catchment could seriously affect electricity, oil and food supplies for the whole country and parts of England and N. Ireland as well.

***I recommend that special consideration is given to flood defence for the Firth of Forth and other areas of significant strategic economic importance to the nation. This should not be the sole responsibility of the relevant local authorities.***

***I also recommend that in such cases flood defences are designed for at least the 0.1% (1,000 year) flood.***

The Scottish Government could regard this threat as an opportunity to adopt a more imaginative solution. A riverside defence for Grangemouth alone would require a 22km stretch of wall with flood gates for each of the tributaries flowing into the Firth and special measures to allow the port to operate and avoid damage to underground pipelines. Even then, Longannet and other infrastructure would still be left undefended.

The alternative is a 4km causeway across the Firth between Charleston and Blackness with a navigation opening with movable flood gates in the middle for shipping. This would provide flood and pollution protection, and allow fish to pass. In this way wildlife habitats would be unharmed.

A short, fixed bridge over the navigation channel would provide a cost effective new crossing for road and rail which could easily be connected to the existing motorway and rail networks. If located upstream of Rosyth, the bridge would not need to be nearly as high or wide as the Queensferry site. The flood barrier could operate in the same way as the barriers on the Thames, Hull or the Rhine. The barrier would only need to be closed if there was a severe storm surge up the Firth, or to allow heavy rainfall in the catchment to run off into the Firth instead of backing up at high tide. There are a number of benefits of such a scheme:

1. There is perhaps more chance of Westminster and the EU agreeing to the borrowing needed for a flood defence of national importance than the borrowing needed for another high bridge at Queensferry.
2. The causeway could be partially constructed from the 4,000 tonnes of ash from Longannet which is dumped into the river every day.
3. In the longer term the possibility exists to generate tidal energy from the causeway at times of peak demand, or even to use it as a pumped storage scheme.
4. Such a causeway could also be used for bulk storage of hazardous materials well away from population centres and as a wildlife corridor.
5. Its appearance would be less intrusive visually and safer to build than a high bridge.
6. A causeway is also less likely to rust.

In any event, regulations should be designed to ensure more joined up thinking and enable strategic solutions to be produced in line with the philosophy of the National Planning Framework.

**Q26. Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government should consider?**

Do the measures make it easier to use abandonment and relocation as a solution?

What about compulsory resilient reinstatement after a flood or storm?

**Q27. Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?**

Yes. Also they should be published on the internet and in public libraries. Perhaps they should also comment on insurability problems?

**Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?**

Yes. However, the appointment of a Flood Commissioner could resolve many of the remaining problems.

**Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?**

There should be a duty to give the protection of life and property equal or greater priority than the protection of flora and fauna. There should also be a greater general duty of care to make it easier for flood survivors to take legal action against a local authority found to be negligent.

**Social Housing**

It is of some concern that many houses in flood hazard areas are owned by social landlords and occupied by vulnerable people such as the old, the poor and single parents with young children. It should also be noted that nearly 50% of tenants of social rented housing do not have contents insurance, despite a government spend of £500,000 to promote insurance with rent schemes<sup>4</sup>. Unfortunately, the previous administration did not bother to consult with the insurance industry before spending this money and the take up of insurance with rent schemes has subsequently actually fallen. Apart from the failure to consult with the insurance industry, another reason for the reduced take up could be that since the control of social rented housing was passed from local authorities to housing associations, many of these associations show little interest in the promoting or administering of such insurance schemes, which can provide a basic level of insurance cover for as little as £1 per week for a pensioner.

A greater take up of such schemes would not only provide support after a flood but also help with social cohesion and social justice issues as they cover other risks such as burglary and fire. Research by the Association of British Insurers<sup>5</sup> shows that poorer households face far greater risks than their more affluent neighbours. For instance:

- ❖ households with an income below £5,000 were 71% more likely to be burgled at least once compared with households with incomes of £30,000 or more;
- ❖ arson rates are up to 30 times higher in the most deprived communities;
- ❖ people with the lowest incomes are also much more vulnerable to flooding.

HM Treasury are currently looking at ways to encourage insurance with rent in England, and it is to be hoped that if the Scottish Government again wish to explore ways to promote such schemes in Scotland in the future that next time they will be prepared to consult with the insurance industry.

**Responses to questions 30 to 34 follow on the next pages.**

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<sup>4</sup> Paolo Vestri, 2007, "Exploring The Take-Up Of Home Contents Insurance", Hexagon Research and Consulting, Scottish Executive Social Research. (web only publication available at [www.scotland.gov.uk/socialresearch](http://www.scotland.gov.uk/socialresearch) )

<sup>5</sup> Association of British Insurers 2007. "Access for All: extending the reach of insurance." ABI, London  
<http://www.abi.org.uk/Newsreleases/viewNewsRelease.asp?nrid=15229>

**RESERVOIR SAFETY****Q30. Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?**

First here are some facts which should be considered.

1. Although dam disasters are rare worldwide, there has been a significant number of dam failures in Britain, which has a legacy of very old dams built over 100 years ago. Of the 14 dam breaks involving loss of life in Britain, three dam have been in Scotland. Together they have cost more than 50 lives<sup>6</sup>.
2. The last major dam break in Britain was as recent as January 2007. It engulfed the village of Storey Middleton in the Peak District leaving a muddy residue to a depth of more than a metre in places, but fortunately there were no fatalities.
3. The average large dam in England is over 110 years old. The average age of dams in Scotland is secret, but the oldest is more than 300 years old.
4. Dam breaks are increasing in frequency around the world and many countries are starting to demolish their dams for safety reasons. Boltby dam in England was demolished after 10,000 people nearly drowned<sup>7</sup> in 2005 after the dam was breached by heavy rainfall. I am not aware of any dams which have been demolished for safety reasons in Scotland. Indeed one is under consideration for "Historic Building" status.
5. Scottish Water owns the greatest number and the oldest dams of any body in the UK.
6. Dam break inundation maps are kept secret from planners who have been allowing new houses to be built in the danger zones. For example, I know that Ministers will be aware of one particularly vulnerable reservoir in Scotland which has two sheltered housing complexes and a sports centre in the danger zone and that there are plans to build a new hospital and school there. There is already a new housing estate directly below the dam wall, just 50 metres away.
7. Until very recently dam break inundation maps were even kept secret from the police, emergency planning officers and rescue services on the grounds of "national security". This made emergency planning and preparation very difficult. One emergency planning officer discovered that the building he had previously picked as an emergency shelter was in the middle of the danger zone.
8. Climate change will increase the risk of dam break due to more severe and prolonged precipitation events causing landslip and overtopping; increased risk of drought causing subsidence; and increased storminess causing wave overtopping.
9. Climate change will also increase the need for reservoirs for water supplies as drier summers are predicted. Scottish Water has the worst record in the UK for leaking water pipes.
10. Energy policy in Scotland will favour the construction of new reservoirs for hydro power. The reservoir at Glendoe, due for completion in 2008, is the biggest civil engineering project of any kind currently under way in Scotland. It is designed to last for 75 years.
11. New satellite and radar technology makes it possible to identify movements of less than a millimetre per year in mass structures, making it possible to have advance warning of possible reservoir failure. The technology is well proven, inexpensive,

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<sup>6</sup> Whinhill, Greenock, 1835 (38 dead); Glanderston, Renfrewshire, 1842 (8 dead); and Skelmorlie, Ayrshire, 1925 (5 dead).

<sup>7</sup> The day before the "incident", (engineers refuse to call it a "failure") between 10,000 and 20,000 people were camped in tents on the bank of the river below the dam for a motorcycle rally. As it was, six stewards picking litter from the campsite were washed away by the force of the water.

and is used in England and continental Europe. However this technology is not used anywhere in Scotland.

So my answer is yes.

Tougher rules should be considered for canals and small reservoirs as well.

**Q31. If so, should it be SEPA or another as yet unidentified body?**

I am not sure if it should be SEPA. In England there have been problems for the Environment Agency with conflicts of interest from two issues:

1. The Environment Agency themselves own reservoirs used for flood risk management. In such cases they have to police themselves. While SEPA may not own any reservoirs at present, if they become the authority for flood risk management they may end up having to take over ownership or responsibility for the maintenance of some reservoirs.
2. There have been a number of cases in England where an emergency draw down of water levels in a reservoir has been required to prevent dam failure. On average six reservoirs each year in England need to have emergency draw downs to prevent failure<sup>8</sup> but sluice gates can become jammed because of age and sediment. Pumps then have to be used. For example, a "near miss" in 2002 involved leakage in a 12m high earth embankment on a 150 year old reservoir containing over a million cubic metres of water<sup>9</sup>. Sluices had jammed and it took three days to pump water to safe levels. Such an emergency release of water can in itself cause flooding, pollution or siltation of downstream rivers. If SEPA were the reservoirs authority, could they be relied upon to order a timely emergency draw down if they knew that they might then have to prosecute themselves under CAR or the 2003 Act? Measures would have to be taken to ensure that SEPA gave priority to public safety rather than the interests of flora and fauna.

Ministers might care to consider alternatives. There are at least four possible options:

**Option A**

Make SEPA the enforcement authority subject to a statutory duty to treat public safety as paramount, notwithstanding the requirements of CAR or the 2003 Act. If necessary give SEPA immunity from prosecution where they have taken emergency action in good faith to prevent reservoir failure.

**Option B**

Reservoirs in Mines and Quarries are exempt from the Reservoirs Act because they are subject to Mines and Quarries legislation. This means that the enforcement authority for them is the Health and Safety Executive (HSE). The HSE is also the enforcement authority for the safety of below ground reservoirs or reservoirs holding less than 25,000 cubic metres of water. In other words, the HSE is already the enforcing authority for many of the reservoirs in the UK. It is also responsible for the safety of canals, waterways and barrages. It would therefore certainly have the expertise and authority to take on this role. One problem is that HSE powers are reserved to Westminster.

**Option C**

<sup>8</sup> Hope, I., 2007. "Development of Flood Plans for Large Raised Reservoirs in England and Wales." Environment Agency, Exeter.

<sup>9</sup> Gardiner, K., Hughes, A., and Brown, A. 2004. "Lessons from an incident at Upper Rivington Reservoir" – January 2002." **Dams and Reservoirs** September 2004 Vol. 14, No 2. British Dam Society, London

Another alternative which might be worth considering is to remove the exemption which reservoirs have from the Control of Major Accident Hazards Regulations. This would automatically introduce a number of requirements and procedures designed to increase public safety. I believe that relevant COMAH regulations are administered in Scotland by SEPA on behalf of the HSE. This may circumvent the reserved powers issue and at the same time ensure that SEPA is supervised by an independent safety body to resolve conflicts of interest.

#### **Option D**

Make the Flood Commissioner the enforcement authority, with a budget to employ inspectors and commission dambreak inundation maps from specialist consultants or SEPA as appropriate. Use the Environment Agency's post incident reporting system to save "reinventing the wheel".

***I recommend Option D as being the most cost effective solution, and one which avoids the conflicts of interest which would arise from using SEPA as the enforcement authority. In any event, if compulsory liability insurance was introduced (see my comments on Q34) this would provide an independent audit of reservoir safety at no cost to the taxpayer.***

**Q32. Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?**

I am content with the proposals as long as steps are taken to ensure best practice in using state of the art dam break inundation software such as that developed under the EU funded "IMPACT" project<sup>10</sup>.

***I recommend that:***

- ***Dam break inundation maps should be merged with general flood maps and published as they are in Sweden.***
- ***Planning restrictions should be placed on any development within the areas of these maps and riverbank camping in such zones should be prohibited.***
- ***Warning signs should be posted with information about evacuation procedures.***

**Q33. Do you agree that enforcement powers be extended and post incident reporting included as an additional requirement?**

Yes.

It should be noted that a post incident reporting system for Scottish Reservoirs has already been introduced by the Environment Agency<sup>11</sup>, but none of the reservoir undertakers or local authorities in Scotland I have spoken to were aware of it, so have not been reporting any incidents. If a separate Scottish system is introduced it should be properly publicised and designed to enable comparison with the English system.

**Q34. Views on crown application and any other comments?**

I have a number of other comments:

<sup>10</sup> see <http://www.samui.co.uk/impact-project/>

<sup>11</sup>See <http://www.environment-agency.gov.uk/news/1465403>



### **Legal Liability and compulsory insurance**

Reservoir undertakers are under a strict liability<sup>12</sup> for any injury loss or damage caused by escape of water. There is no defence at law, so they can be liable even if there has been no negligence.

Responsible reservoir undertakers will already have adequate public liability insurance, and there is an established market of specialist reservoir liability insurers. Compulsory liability insurance would not be an onerous requirement for them, although they may not all have an adequate level of cover (known as the "limit of indemnity"). The concern is that a number of reservoirs are owned by farmers or clubs who are unlikely to be able to pay damages following escape of water or to implement safety recommendations.

Liability insurance is already compulsory for all employers in respect of their employees and public liability insurance is compulsory for motorists and riding schools, so there is a precedent. Insurers would be happy to provide evidence of insurance which could be supplied to the enforcement authority when they check inspection reports. It would be sensible to require reservoir owners to take out public liability insurance for a minimum limit of indemnity of say £5m, rising to higher levels for reservoirs where there are significant numbers of people or property in the dam break inundation zone. Not only would this enable those suffering damage to obtain compensation, it would ensure that the insurance industry would assist with risk management and supervision activities. Insurers would regularly monitor safety issues and could threaten to withdraw cover if safety recommendations were not met. This would provide a strong economic incentive for reservoir owners to comply with the recommendations of the panel engineers and insurance surveyors. For example, I am aware of at least one Scottish reservoir where the panel engineer's basic safety recommendations to a major utility made over 20 years ago have still not yet been implemented. (I am prepared to give details privately if required.)

### **Some benefits of compulsory public liability insurance:**

1. No cost to the taxpayer
2. Regular independent risk assessments by insurers.
3. Specialist reservoir liability insurers can bring additional expertise and advice to safety management.
4. Economic incentives to implement safety recommendations or to draw down disused reservoirs to make them safe.
5. Special attention given to the safety of Category A reservoirs.
6. Low premium costs due to a competitive market and the low historic frequency of reservoir failures.
7. Assistance with emergency planning procedures and exercises.
8. Spread of best practice and monitoring technology from around the world due to the global nature of insurance.
9. Costs of a disaster spread through reinsurance across the world instead of being felt only by the Scottish economy.
10. Speedy compensation for disaster survivors.

Suggested minimum limits of indemnity are shown in the annex.

***I would recommend that public liability insurance be made compulsory for all reservoirs subject to the 1975 Reservoirs Act, with appropriate limits of indemnity***

<sup>12</sup> Rylands v. Fletcher (1868) L.R. 3 H.L. 330; [203 L.T. 82; 204 L.T. 237; [1956] C.L.J. 13; 23 Sol. 191; 72 L.Q.R. 311; 19 M.L.R. 419; 100 S.J. 659; 11 Conv. 259; 11 I.C.L.Q. 937; 3 Legal Executive 3; 121 New L.J. 183]; affirming sub nom. Fletcher v. Rylands 91866) L.R. 1 Exch. 265

***(see Annex). This would not be an onerous requirement for responsible owners and would not be costly to administer or introduce.***

### **Transparency**

Panel engineers' inspection reports, supervising engineers' reports and dam break inundation maps have been shrouded in secrecy. This has discouraged insurers from underwriting the risks. A new era of transparency would help to ensure that the public are better informed about the risks and dangers. If this was combined with compulsory insurance it might reduce the fear of the unknown.

### **New technology**

The European GMES project<sup>13</sup> will highlight the greater use of satellite technology to monitor risks. The latest satellite technology can already give advance warning of possible failure of mass structures such as dams by measuring sub millimetre movement using Permanent Scatterer Synthetic Aperture Radar Interferometry ("PS InSAR") from satellites such as ENVISAT. UK government has already spent £300m on the ENVISAT satellite and what is needed now is the installation of transponders or corner reflectors on dam walls to provide high resolution data to monitor reservoir safety. Thames Water has fitted corner reflectors in England, but none have been fitted in Scotland yet. There is also a 'Compact Active Transponder' (CAT) which is more versatile, but more expensive (about £750). So far no CATs have been mounted on a reservoir, but they have been used on pipelines and beside motorways.

The processing of the PS InSAR data can have a significant cost, but the cost of installing transponders or reflectors is nominal. If reflectors were installed now, then a data archive could be built up. This means that should the dam develop cracks, the movements leading up to the cracks appearing could be analysed. If the dam fails, there would be a record of previous movement. When there is another dam break disaster, there would be data available to enable other similar dams to be checked for movement. In other words, the sooner reflectors are installed the sooner an archive of data can be built up ready for future disasters.

***I would recommend that it be made compulsory that PS InSAR reflectors or transponders be fitted to every Category A reservoir (see Annex).***

Large numbers of reflectors or transponders would not be needed; the European Space Agency is currently developing satellite technology even further so that vertical ground movements can be detected without the need for corner reflectors or transponders. The resolution is not as good but it is still able to detect vertical ground movement of as little as 1mm per year from 800km up in space. The technology has discovered ground movements of up to 20mm per year in alluvial plains and flood risk areas. This clearly has implications for general flood mapping as well.

The remote sensing industry is also now working on a new technique using the same radar principles, but operated from the ground rather from satellite. Basically this is set up in front

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<sup>13</sup> The 'Global Monitoring for Environment and Security' (GMES) initiative represents a concerted effort to bring data and information providers together with users, so they can better understand each other and agree on how to make environmental information available to the people who need it. A second specific goal is the creation of a 'European Shared Information System' for exchanging of a wide range of useful information on environment and security matters. GMES seeks to make this dialogue permanent by creating a specific authority and funding framework. See [www.gmes.info](http://www.gmes.info)

of the dam wall and continuously scans it, and is also capable of picking up millimetric deformation. The equipment costs about £100,000. It could either be used periodically to pick up small changes in the shape of the dam wall (bulges etc) or in the event of an emergency could be kept continuously in situ to monitor short term changes. It would be ideal, for example to monitor the first year of operation of the Glendoe reservoir with its 905m long wall. If compulsory insurance was introduced for reservoirs, it is possible that insurers might fund the use of such technology themselves as a loss prevention measure.

#### **Causes of reservoir flooding not covered by the Reservoirs Act**

There has been an increase in the number of dam failures around the world in recent years<sup>14</sup>. And the dangers are increasing due to climate change<sup>15</sup>. Legislation should take into account all possible causes of failure, including causes not catered for under the provisions of the Reservoirs Act. For example:

#### **Overtopping**

Many reservoirs are in valleys where a landslide into the reservoir could cause disastrous overtopping. In 1963, overtopping of the Vaiont dam in Italy caused by a landslide resulted in 1,189 deaths, even though the dam itself remained intact. Panel engineers are not required to consider the risk of landslide into the reservoir, and often do not. Yet such risks are becoming greater due to climate change, especially where the hillside is covered in peat. Scotland suffered a number of peat slides in 2003 due to heavy rain following a dry summer. In fact overtopping is the most common cause of fatal dam failure in Britain.

#### **Snow melt**

Snowmelt can produce sudden large amounts of runoff. Reservoir owners may be able to control this by having a large release of water before the snow starts to melt in order to reduce peak flows. Great foresight was shown in the form of the cooperation of the owners of the large hydro electric schemes upstream of the Tay in 2003, as the reservoir water levels were allowed to fall in order to provide capacity for the inevitable snowmelt, otherwise the Perth floods could have been even worse<sup>16</sup>. Nevertheless such deliberate releases of large volumes of water can cause damage and pollution downstream and CAR and the 2003 Act may prevent them in the future. Undertakers may in future take the risk that the dam may breach rather than break the law by allowing such releases, as they may consider they can then use this as a defence to a possible Corporate Homicide prosecution.

In any event there should be an obligation to keep spillways and downstream watercourses clear so that they can cope with sudden flows.

#### **Computer software problems**

These have been known to cause failure of dams. For example the Taum Sauk pump storage dam failure in the USA in December 2005

**See Annex on next page.**

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<sup>14</sup> Bosshard, P., and Switkes, G., 2004. "Rash of Dam Failures Raise Safety Concerns" World Rivers Review Vol. 19 No. 4, p7. August 2004. International Rivers Network, Berkeley, California, USA.

<sup>15</sup> [http://www.defra.gov.uk/environment/water/rs/pdf/climate\\_change\\_reservoirs.pdf](http://www.defra.gov.uk/environment/water/rs/pdf/climate_change_reservoirs.pdf)

<sup>16</sup> McNally, G A, Anderson, J L and Lee, D., 1995. "Positive operation of hydro-electric schemes to aid flood control: experiences in the Tay catchment." In: Reservoirs in River Basin Development. Eds – Santbergen & Van Westen. Balkema, Rotterdam, The Netherlands.

## Annex

## Categories currently in use.

## Crichton recommendations

<b>Reservoir Category</b>	<b>Potential consequence of reservoir failure</b>	<b>Compulsory public liability insurance - recommended requirement.</b>	<b>Recommended Minimum Limit of Indemnity (each and every occurrence)</b>	<b>Recommended requirements for PS InSAR transponders or reflectors.</b>
A	At least 10 lives at risk and extensive property damage	Yes	£50m	Compulsory installation of transponders or reflectors.
B	Fewer than 10 lives at risk or extensive property damage	Yes	£20m	Advisable
C	Negligible risk to human life but some property damage	Yes	£5m	Advisable
D	Negligible risk to human life and very limited property damage	Yes	£1m	Advisable

In addition, planning restrictions should be placed on development in dam break inundation zones and river bank camping should be prohibited in such zones.

End.

041

**DUALCHAS  
NADAIR  
na h-ALBA**



Battleby  
Redgorton  
Peairt  
PH1 3EW

Fòn: [REDACTED]  
Facs: 01738 458611  
Làrach-lìn: www.snh.org.uk

**SCOTTISH  
NATURAL  
HERITAGE**



Battleby  
Redgorton  
Perth  
PH1 3EW

Telephone: [REDACTED]  
Fax: [REDACTED]  
Website: www.snh.org.uk

Frances Conlan  
Water, Air, Soils and Flooding Division  
The Scottish Government  
1H North  
Victoria Quay  
Edinburgh  
EH6 6QQ

Our ref: PF 249/07-08

21 April 2008

Dear Frances

### **Consultation on the Future of Flood Risk Management in Scotland**

Thank you for consulting us on the above.

We welcome the Scottish Government's intention to revise Scotland's flooding legislation to make it more effective than at present, to plan for dealing with flooding at the catchment scale and allow the utilisation of natural flood management techniques as part of the suite of measures to tackle flooding.

We have responded to the individual questions in the consultation, where they relate to the natural heritage, and these comments are set out in the attached annex.

Some of the key points from our response are highlighted below:

- We recommend that guidance is produced to clarify what is meant by sustainable flood management and what the duties are of responsible authorities.
- Of particular importance is guidance on the place of natural flood management and what measures are appropriate where. This guidance needs to be informed by further research and demonstration projects put in place in the run up to the production of the first Local Flood Risk Management Plans (LFRMP).
- For future funding rounds, consideration should be given to funding the LFRMP as an entity and not the local authorities where significant flood risk has been identified; the measures needed to deal with this flood risk may be situated outwith this local authority boundary and there is the potential for funding wrangles.

- The main role for SNH in production of flooding plans is in promoting natural flood management measures and the multiple benefits they have for biodiversity, geodiversity, landscape, amenity and reducing diffuse pollution. We also have a statutory duty to advise on the impact of development/activities on designated sites and protected species and to advise on sustainability.
- We would suggest that consideration be given to a duty for responsible authorities to implement Local Flood Risk Management Plans, as well as a duty to collaborate in their production.
- We consider it essential that integrated urban drainage plans are a part of Local Flood Risk Management Plans. Measures under these plans can reduce flood risk and also benefit the natural heritage eg identifying and protecting green space that can also be used for flood storage; giving space to watercourses to improve landscape, recreation and biodiversity and allowing for storm flows; using Sustainable Urban Drainage Systems to reduce diffuse pollution, improve the environment and reduce surface water run off to sewers.
- Consideration needs to be given to streamlining procedures that Scottish Water have to use to reach agreement with local authorities and others over adoption and maintenance of SUDS beyond the 1 in 30 year flood event.
- Strong links need to be made between flooding plans and development plans to ensure that future developments do not add to flood risk and that natural habitats and green space that contribute to flood alleviation are protected.
- There is a need to streamline the processes dealing with Controlled Activities Regulations and planning and to ensure that appropriate assessment on Natura sites is included in this.
- Procedures to deal with coastal flooding need to be included as appropriate in any revision of legislation. Will current difficulties in taking forward sustainable measures for coastal flooding be dealt with by the proposed changes in legislation?

If you wish to discuss any of the points in this consultation response then please get in touch with Sarah Hutcheon [REDACTED]

Yours sincerely



**John Thomson**  
**Director, Strategy and Communications**

## Annex

**Q1 Do you believe the definition of SFM is helpful and of practical benefit to flood risk management?**

**Q2 Do you think the definition is clear and simple to understand?**

Whilst recognising (and having been involved in) the work that has gone in to producing the definition, we do not think that the definition on its own is of practical benefit or is clear and simple to understand. In our experience of discussing sustainable flood management (SFM), different interpretations can be placed upon the definition produced by the Flooding Issues Advisory Committee (FIAC). That said, we believe it would be difficult to come up with an alternative definition that would easily set out for all stakeholders what is meant by SFM. This means that, in order to help implementation of SFM and clarify what is meant, it will be important to produce guidance for responsible authorities. An important part of this guidance would be examples and case studies of best practice and lists of types of measures that need to be considered eg natural flood management measures.

The Strategic Environmental Assessment of the consultation document suggests that the principles outlined for SFM don't promote opportunities for enhancement that are possible through SFM, although the text of the consultation and the case studies do. Again, this emphasises the importance of guidance in helping everyone understand what the intention and spirit of the legislation is rather than just a strict definition.

**Q3 Do you agree with the conclusions as set out in paragraph 3.17?**

We agree that a single competent authority will help to ensure a national, catchment focused approach to flood risk management planning. Whilst recognising the experience of local authorities in implementing flood prevention schemes, we have concerns that local authorities do not have a great deal of expertise in assessing the opportunities for and implementing natural flood management measures. Local authorities and other responsible authorities will need guidance in how this element of SFM should be delivered, if truly sustainable, catchment focused schemes are to be developed. There will also be a need for building up of skills and technical expertise in natural flood management and awareness raising with responsible authorities.

**Q4 Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?**

From the information set out in the consultation it would seem appropriate that there is one national, competent authority and that SEPA should carry out this role.

SEPA are more used to dealing with stakeholders in the role of regulator. This new role will require them to further develop their skills in working in partnership.

We understand that the Scottish Government is considering giving SEPA, as the competent authority, the role of identifying the most sustainable measures for flood

risk management and for ensuring that opportunities for natural flood management are identified at an early stage eg when working through flood risk and hazard mapping. We would welcome this consideration of NFM and sustainability at an early stage in flood risk management planning.

**Q5. Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?**

One of the example tasks in the Local Flood Risk Management Plan production is the appraisal of management options and selection of preferred measures. It is here that natural flood management (NFM) measures can be brought in, where appropriate. Determining where it is appropriate to incorporate such measures will be a process that most responsible authorities will not have much experience of.

There is time before the production of the first plans to further investigate the effectiveness of natural flood management techniques and to demonstrate best practice. Such demonstration projects could develop tools and/or guidance to assist responsible authorities in selecting appropriate measures and determining how they are best funded and managed.

The role of natural flood management techniques as part of sustainable flood management is important. Consideration needs to be given to guidance or possibly regulation of what goes into Local Flood Risk Management Plans in relation to NFM, otherwise there is the danger that the process of flood risk management is revised but no changes are seen in the sort of schemes developed.

An advantage of natural flood management measures is that as well as providing for flood management they can also contribute to reducing diffuse pollution and improving biodiversity, geodiversity, amenity and landscape. By re-establishing habitat networks that have become fragmented and restoring natural ecosystem processes, there will also be an increased resilience to climate change. Importantly, these additional benefits from Natural Flood Management measures accrue at all times, not just during flood events.

The Local Flood Risk Management Plans will be able to set out NFM measures that will be taken forward by responsible authorities such as local authorities and Forestry Commission as part of flood management. They would also be able to set out other measures that could be taken forward by other stakeholders to contribute to flood risk management eg creation of wetlands by individual landowners, possibly funded by the Scottish Rural Development Programme. The Plan can indicate where such measures would be welcomed as additional support to flood risk management and so help target other sources of funding.

We understand that the Scottish Government is considering developing a strategy for natural flood management which would include research and demonstration work to inform future guidance and secondary legislation. We would be pleased to be involved in developing this work.

With regard to funding, we have a concern that if funding is given to the local authority with the identified significant flood risk, this funding is likely to be given to local authorities with communities situated downstream in catchments. Part of the



solution to these flooding problems might be natural flood management measures in the upstream catchment which might be in another local authority area. There might then either be disputes over handing over money for measures in another local authority or, alternatively, a tendency to spend money given to a specific local authority on sub-optimal measures that happen to fall within its own boundaries. A preferred alternative for future funding rounds would be for the funding to be allocated to the Local Flood Risk Management Plan, to be administered by all the relevant local authorities.

As a member of the Flooding Bill Advisory Group, we have received an update on proposals for flood risk management plans produced by the Flooding Bill team. An important element of these is a change in scale proposed for implementing production of plans. As we understand it, it is now proposed Area Flood Risk Management Plans (as set out in Box 7 in the consultation) should become one or two national (District) plans for Scotland. The Local Flood Risk Management Plans would then be prepared and implemented at the scale of the current WFD sub basins. A national advisory group would support production of the district plan and additional advisory groups would be set up, linked to the local plans. The scale of these plans and groups (and representation required from responsible authorities) would ally closely with current requirements for WFD and would seem to be an improvement on what is proposed in the consultation document.

**Q7. Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?**

We agree that this list of bodies should be identified as responsible authorities. SNH has an interest in promoting natural flood management measures as a component of sustainable flood management, seeking to improve biodiversity, geodiversity, amenity and landscape and to reduce diffuse pollution. We also have a statutory duty to advise on impacts on designated sites and protected species from development/activities such as flood risk management and to advise on sustainability. These are likely to be the main areas that SNH would wish to be involved in when developing Flood Risk Management Plans.

**Q8. Which other bodies should be identified as responsible authorities?**

Given that Forestry Commission Scotland has been identified for bringing forward forestry measures, it might seem appropriate to identify Scottish Government Rural Payments and Inspection Division be identified as a responsible authority for agricultural measures. We recognise, however, that there may be constitutional obstacles to identifying them in legislation in this way.

**Are SEPA automatically a responsible authority as well as a competent authority?**

Should the same organisations as are responsible authorities under WFD be identified here? In which case this list would need to include the British Waterways Board, National Park Authorities and district salmon fisheries boards.

**Q9: Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?**

We agree that it is essential that responsible authorities have a duty to work together to produce the plans. We welcome the links with WFD advisory groups that is proposed here, in order to ensure connections are made between work on flooding and work being carried out on the water environment as part of WFD implementation. We would suggest that lessons need to be learned from the WFD process of setting up and running AAGs to ensure the most efficient participation of responsible authorities in the production of the plans.

**Q10. Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?**

To support wider stakeholder and community engagement in flood risk management planning we would suggest that some sort of national support is needed for local stakeholder groups/fora. We understand that the Scottish Government are still planning to support the extension of the National Flood Forum from England to Scotland. We believe this would help with community engagement in the flood risk management planning process.

**Q11. Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?**

Yes.

**Q12. Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?**

Yes.

We also agree that Ministers should not have a role in approving Local Flood Risk Management Plans but recommend that there should be a procedure for responsible authorities to notify Ministers of concerns over the progress or direction of the Local Plans. This would be a measure of last resort but would help concentrate minds on reaching agreement between responsible authorities on the content of plans.

We understand that the Scottish Government is considering giving Scottish Ministers power to intervene to break deadlocks on development of Local Flood Risk Management Plans and we would agree that this might also be a useful power to have, although again we would see it as a measure of last resort, valuable mainly as a spur to the parties to find a consensus than as a tool to be used.

A possible alternative (or refinement) would be to provide in the legislation for some form of formal dispute resolution procedure, involving an expert impartial arbiter. This would have the advantage of relieving Ministers of a direct role and of injecting additional expertise into the regime. But this would of course be at the price of extra complexity and probably cost.

Ministers also have a role in ensuring compliance with the plans. As the consultation says responsible authorities are accountable for the conduct of their statutory duties. However, the consultation only goes as far as proposing a duty to collaborate on producing plans. Should there not also be a duty to implement the plans? Responsible authorities would then be clearly accountable to ministers for taking forward actions from the plans.

We understand that the Scottish Government is considering requiring responsible authorities to agree an implementation plan as part of the Local Flood Risk Management Plans. Depending on the detail required in the implementation plan this may move towards the position of being reassured that action is being taken as opposed to just being planned and proposed.

**Q13. Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?**

Integrated urban drainage plans must form part of Local Flood Risk Management Plans; if they do not, a justification for their omission should be given. If sewer flooding is not to be included in the transposition of the Floods Directive then it is essential that urban drainage plans are included on the list of requirements in the proposed Regulations on the content of Local Flood Risk Management Plans.

From a natural heritage perspective, urban drainage plans can describe the multiple benefits that can be delivered by dealing with flood risk in the urban environment eg maintenance of green space that enhances the local environment and can also be used for flood storage, green corridors alongside watercourses that allow for storm water flows, deculverting of watercourses, use of Sustainable Urban Drainage Systems (SUDS), such as constructed wetlands, that improve biodiversity, landscape and amenity and also reduce diffuse pollution.

Appropriate management of surface water run-off can reduce flooding risks and the risk of sewers being overloaded and overflowing. Under the WEWS Act and the Controlled Activities Regulations, almost all new developments are required to have SUDS installed to deal with surface water run-off. These SUDS can be adopted by Scottish Water where they are in public areas. However, currently Scottish Water is constrained by only being allowed to adopt/maintain SUDS that meet the drainage requirement of a 1 in 30 year flood event. It cannot take on and maintain schemes that exceed this standard. This leads to the situation in which legal agreements have to be made to determine responsibility in cases in which, for example, a larger pond is desired for amenity purposes, or SUDS schemes are built that will help deal with levels of floods more severe than the 1 in 30 year flood event.

As described in the consultation, Scottish Water is currently drawing up a standard Section 7 agreement under the Sewerage (Scotland) Act 1968 that it wishes to agree with all Local Authorities. It then plans to append to this agreement schedules for individual developments that set out who is responsible for each component of SUDS. This seems like a rather convoluted way of dealing with a measure which is a logical part of an integrated approach to managing drainage, flooding and amenity. Is there any opportunity to streamline this process when revising the flooding legislation?

Part of integrated urban drainage plans and proposals for funding under Local Flood Risk Management Plans might be consideration of retrofitting SUDS to particularly problematic developments, where feasible.

Another item to consider would be to remove permitted development rights for non permeable surfacing in gardens – as DEFRA are currently proposing for England.

Q14. Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?

There should be a stronger linkage to ensure that development plans have regard to FRMPs. The planning process plays a really important role in avoiding creating new flood risk for communities and protecting habitats/open space that have an important role to play in flood alleviation.

There will be a need to update planning guidance to take account of new flooding legislation once it has been agreed.

Q15. Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?

Yes.

As with all formal planning procedures, the process will work best if there is early engagement with stakeholders to discuss the detail of proposals. This allows for early comment and discussion and reduces the likelihood of objections being lodged at the formal application stage.

Q16. Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?

An important change to flooding legislation, although not explicitly stated in the consultation document, is the inclusion of agricultural land and funding the use of agricultural land for flood alleviation. This change will allow for more soft engineering measures to be undertaken. These generally do not require planning permission but do require discussion and agreement, and may require other consents such as CAR authorisation.

It would be feasible under both of these options for ministerial or local authority approval to be only applicable to elements requiring planning permission. This would allow other measures such as natural flood management measures to be taken forward outwith this process. Such measures would have been consulted on as part of the FRMP.

However, the details of these measures would still need to be agreed and if being taken forward using local authority powers, these should be developed through a

open and democratic process. Keeping all necessary measures of a flood alleviation scheme together for approval would mean that all the elements of a scheme could be considered together, giving opportunity for comment or objection. Then all necessary appraisals and approvals including planning, CAR and Natura appropriate assessments could be considered at the same time.

For example, some natural flood management measures such as management of river channels need detailed investigation and design work to ensure appropriate techniques are used in the right location. This work would go beyond what would be in the Local Flood Risk Management Plan, would require scrutiny by people with the appropriate technical expertise and would still require a formal approval process as CAR authorisation would be needed. Although not requiring planning permission, it may require changes of use of land manager's land and so needs to be openly discussed and agreed.

It is still entirely possible that there may be natural flood management measures that could be taken forward in a catchment that would not form part of a flood alleviation scheme. The Local Flood Risk Management Plan could differentiate between natural flood management measures that are considered essential for a flood alleviation scheme and those that could provide additional benefits. Those essential to a scheme could be taken forward by the local authority through the formal approvals process but the other contributory elements could be taken forward by land managers with other funding as and when opportunities arose.

The FRMP could contain a map indicating where certain natural flood management measures would be most appropriate eg where wetlands could be created or restored, where riparian woodland would be most advantageous etc and this would allow these measures to be put in place using whatever funding was available. This would help provide a strategic steer to land managers accessing other funding streams such as the Scottish Rural Development Programme.

Q18. Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?

Yes.

We note that under the local authority based process, responsible authorities would be statutory consultees on flood schemes and an objection from a responsible authority could result in the scheme being called in by Scottish Ministers. We would wish to see and agree the detail of issues/circumstances that would lead to a scheme being called in.

It should be noted that whilst use of compulsory purchase powers might be needed for flood management, natural flood management measures are likely to require ongoing land management eg. woodland management or grazing. Thus purchasing the land will not on its own be sufficient to secure the required benefits; provision will also have to be made for ongoing management.

Q24. Do you agree that streamlining the CAR and flooding/planning processes can be managed through better guidance?

This is an important issue for all planning applications that require CAR authorisation and not just for flooding. There is an important job to do to align the CAR and planning processes – for applicants and for consultees!

**Q25. Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?**

It is also important to consider appropriate assessment of plans and projects on Natura sites. It should be possible for SEPA to incorporate the appropriate assessment of plans and projects likely to have a significant effect on Natura sites at the same time as assessing the CAR application. SNH is working with SEPA to try to improve the process for dealing with CAR applications on Natura sites.

**Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?**

The proposals should improve the situation in relation to flood risk management in Scotland. As described above, further work is needed to clarify what is meant by Sustainable Flood Management and to provide guidance to responsible authorities as to what is required of them. We particularly feel that guidance is needed on the role that natural flood management can play, as this will be a new component of flood risk management for many.

**Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?**

We have suggested that a duty on responsible authorities to implement the plan would ensure that responsible authorities would be accountable for delivering plans rather than just collaborating on their production.

A duty to promote measures could be useful, as a wide range of stakeholders outwith the responsible authorities have roles and responsibilities to take forward. Responsible authorities under the WEWS Act already have a duty to promote SFM, of course.

**Q34. Views on crown application and any other comments?**

It should be remembered that some reservoirs are designated sites and will therefore have nature conservation interests to take into account.

Other comments:

Coastal flooding

We were disappointed to see that there was very little in the consultation on coastal flooding issues. Coastal flooding will need to be addressed in Flood Risk Management Plans. The Coast Protection Act 1949 is not referred to in the Annex summarising flooding legislation, even though some of the problems dealing with coastal flooding in a sustainable manner are due to this legislation or its interpretation. We would wish to know how it is planned to deal with coastal flooding where it differs from procedures needed for inland flooding. How are projects related to flooding that are currently dealt with under the Coast Protection Act going to be dealt with under the new legislation?

According to the recent report 'Scotland's seas – towards understanding their state' (ordered by Richard Lochhead to prepare for forthcoming marine legislation and prepared by SNH, SEPA and FRC), 12% of Scotland's coast is already subject to serious erosion, and that is set to get worse due to climate change. The authors warn that climate change will bring stormier seas, higher sea levels and bigger waves. This will increase coastal erosion and increase the risk of flooding for coastal communities.

It is important that the issue of coastal flooding is not sidelined in developing new flooding legislation. It will also be important to create links with the forthcoming Scottish Marine Bill and Marine Spatial Planning System when considering coastal and estuarine flooding.

Examples of problems we have encountered in relation to coastal flooding have been:

- Under the Coast Protection Act, some of the softer (and more sustainable) methods that might be adopted are at a disadvantage because their broader environmental benefits are not incorporated within the strict cost-benefit analysis. Examples of the exclusion of these broader benefits include recreational benefits being excluded from beach-feeding projects, and multiple benefits, which may include biodiversity, fisheries and amenity as well as simply flood defence, which can derive from saltmarsh creation. This militates against integrated, more sustainable and more modern approaches to managing coastal erosion.
- There is currently no mechanism to fund coastal realignment projects in Scotland. This contrasts sharply with the situation in England and Wales, where there has been agri-environment funding for the restoration and creation of saltmarsh for many years. We hope this will change with the new legislation and managed realignment could be considered as a measure to be funded through flood risk management plans.

#### Land Drainage Acts

The Land Drainage Acts also contain powers to deal with flooding and have impacts on the water environment. Whilst rarely used in recent times, they are examples of legislation that do not fall in step with what is proposed under the new flooding legislation. We consider that the opportunity to review this legislation should be taken at this time.

### **Transitional arrangements**

**Flood Risk Management Plans will not be in place until 2015. There is a lot of preparatory work to be done before that date but in the meantime flooding events will continue to happen and Local Authorities will continue to take forward flood risk management proposals. Consideration needs to be given to how to deal with this transitional period to ensure that steps are taken towards the more sustainable schemes that need to be in place.**

**Finally, to note an error in the Glossary – SNH is Scottish Natural Heritage not National Heritage.**



042

**From:** [REDACTED]  
**Sent:** 21 April 2008 13:58  
**To:** Flooding, Erosion and Reservoir Safety  
**Subject:** Consultation Response

.....  
 This email has been received from an external party and  
 has been swept for the presence of computer viruses.  
 .....

## The Future of Flood Risk Management in Scotland

### RESPONDENT INFORMATION DETAILS

**Name:** [REDACTED]  
**Organisation:** Glen Urquhart Land Use Partnership  
 (GULUP)  
**Address:** Lochletter Farm Balnain Glen Urquhart  
 Inverness-Shire  
**Postcode:** IV63 6TJ  
**Email:** [REDACTED]  
**Telephone  
 Number:** [REDACTED]  
**Responding as:** On behalf of a group or organisation  
**Individual  
 Permission:** Not Supplied  
**Confidentiality:** Not Supplied  
**Group or  
 Organisation:** Yes  
**Share Response  
 Permission:** Yes

### Consultation Questions The Future of Flood Risk Management in Scotland

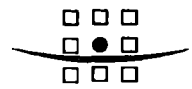
<b><i>Question 1: Do you believe the definition of SFM is helpful and of practical benefit to flood risk management?</i></b>	Yes, particularly the importance of looking at the whole catchment area beyond the impacted urban area to include agricultural and other rural businesses.
<b><i>Question 2: Do you think the definition is clear and simple to understand?</i></b>	Yes
<b><i>Question 3: Do you agree with the conclusion</i></b>	Yes

<i>as set out in paragraph 3.17?</i>	
<b>Question 4: Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?</b>	Yes, although as SEPA seems to be already overloaded with implementing CAR, it needs to evolve. At present the consultation process has been bureaucratic, expensive and slow and often has the effect of halting pro-active river maintenance.
<b>Question 5: Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?</b>	Yes, with emphasis on robust and scientific evidence (as stated in 3.18). Consideration must also be given to the Community Council's view reflecting local opinion and knowledge.
<b>Question 6: Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?</b>	It should be left to the partners.
<b>Question 7: Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?</b>	Yes, but noting that responsible authorities such as FC or SNH sometimes have conflicting views to SEPA. It is essential that the responsible authorities consult meaningfully with the affected local communities.
<b>Question 8: Which other bodies should be identified as responsible authorities?</b>	Local fishery boards.
<b>Question 9: Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?</b>	Yes, but they must also listen to communities along with input from any local group concerned with flood alleviation, including the local fisheries board, land use partnerships, and other land managers as appropriate.
<b>Question 10: Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?</b>	Yes, but only if there is relevant feedback from local knowledge and good communication, there will not be consensus.
<b>Question 11: Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?</b>	Yes, if SEPA have consulted with stakeholders before drawing up the plans.
<b>Question 12: Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?</b>	Yes, provided that Ministers are well advised.
<b>Question 13: Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?</b>	Yes.
<b>Question 14: Should Flood Risk Management Plans inform the way that development plans</b>	Yes, this should definitely be a requirement.

<i>are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?</i>	For example, planners can be under pressure from developers to build on flood plains.
<i>Question 15: Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?</i>	Yes, it should speed up the process.
<i>Question 16: Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?</i>	No, they should be allowed to proceed except for schemes having a significant impact.
<i>Question 17: Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?</i>	No. There is a need to speed up communication: three months from SEPA is far too long.
<i>Question 18: Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?</i>	Yes, providing they talk with the people affected.
<i>Question 19: What would be the appropriate timescales for notification and response?</i>	One month, unless scheme is very complex.
<i>Question 20: Would it be appropriate for such a process to carry deemed planning consent?</i>	Possibly, if the Community Council is satisfied with this.
<i>Question 21: How should the issue of technical expertise and capacity be addressed?</i>	In-service courses could keep Local Authority engineers aware of new developments, eg Sustainable Flood management (SFM).
<i>Question 22: How could such a process ensure the necessary technical standards are observed?</i>	If a local consensus was reached, could a group take action themselves?
<i>Question 23: Are there any additional alternatives to the options outlined above which would simplify procedures?</i>	Yes, if properly applied and local Community Councils were involved.
<i>Question 24: Do you agree that streamlining the CAR and flooding/planning processes, can be managed through better guidance?</i>	Possibly, if the guidance is well managed. The current processes may however require re-evaluation.
<i>Question 25: Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?</i>	Yes, minimise the red tape and listen to the affected communities, let them have input at workshops with flooding experts such as River Restoration advisers.
<i>Question 26: Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government</i>	No

<i>should consider?</i>	
<b>Question 27: Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?</b>	Yes, and we think clarity and more concise language would be a start.
<b>Question 28: Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?</b>	Yes, it could be a step in the right direction. The process will of course require careful implementation and adequate funding.
<b>Question 29: Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?</b>	Local authorities must have sufficient funding to undertake long-term flood alleviation measures - these funds could be ring-fenced. Many hydrologists are committed to "hard" engineering solutions while more natural "soft" measures throughout the catchment areas could make a significant difference. If climate change means an increasing number of flood incidents are likely, we need a wider range of options for sustainable solutions.
<b>Question 30: Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?</b>	No further responses
<b>Question 31: If so, should it be SEPA or another as yet unidentified body?</b>	
<b>Question 32: Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?</b>	
<b>Question 33: Do agree that enforcement powers be extended and post incident reporting included as an additional requirement?</b>	
<b>Question 34: Views on crown application and any other comments?</b>	

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**ROYAL HASKONING**

**HASKONING UK LTD.  
COASTAL & RIVERS**

Frances Conlan  
Water, Air, Soils and Flooding Division  
The Scottish Government  
1H North  
Victoria Quay  
Edinburgh  
EH6 6QQ

Royal Haskoning  
126 West Regent Street  
Glasgow G2 2BH  
United Kingdom

Telephone  
0141 2225771 Fax  
Info@glasgow.royalhaskoning.com E-mail  
www.royalhaskoning.com Internet

Your reference :  
Our reference : /L/301904/Glas  
Direct line : [Redacted]  
E-mail : [Redacted]  
Date : 21<sup>st</sup> April 2008  
Enclosure(s) : -

**Subject : Royal Haskoning's response to the Scottish Government  
Consultation Document: 'The Future of Flood Risk Management in  
Scotland'.**

Dear Frances,

Royal Haskoning thank the Scottish Government for the opportunity to respond to this important consultation document and to share our experience of flood risk management.

Royal Haskoning have considerable experience of delivering both fluvial and coastal flood alleviation schemes in Scotland through our flood risk management framework with The Moray Council and long term association with North Ayrshire Council. As framework consultants to the Environment Agency on both their 'Strategic Flood Risk Management' and 'National Engineering and Environment Consultancy Agreement 2' frameworks Royal Haskoning are able to provide a UK perspective and the benefit of our experience in implementing and delivering national strategic flood risk management programmes.

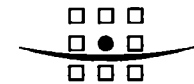
Royal Haskoning would welcome any opportunity to discuss our response or to further assist the Scottish Government in developing the Flooding Bill.

Yours sincerely,

Paul Hart

Royal Haskoning Glasgow Office Manager  
& Coastal & Rivers Team Leader





**ROYAL HASKONING**

**Q1. Do you believe the definition of SFM is helpful and of practical benefit to flood risk management?**

A common definition and understanding of SFM is essential in setting the new direction for flood risk management in Scotland.

**Q2. Do you think the definition is clear and simple to understand?**

The definition developed by the FIAC is clear and sensible. The concept of resilience is important as flood risk cannot be completely removed. Bringing resilience in at the highest level of definition will help focus attention on when protection levels are exceeded, and the ability of areas to recover quickly from the likely increase in number of severe events. The terms 'fair' and 'affordable' in the definition will need more work in associated guidance documents, which may need to be flexible in that they will need to reflect changing government priorities.

**Q3. Do you agree with the conclusion as set out in paragraph 3.17?**

Royal Haskoning undertakes flood risk management work across Europe and beyond. We recognize from our experience that a single competent authority is essential if there is to be consistency in assessing need and delivering sustainable solutions. As well as the EU Floods Directive requiring such an arrangement, we believe the SFM definition proposed can only be implemented successfully through one national body taking an overall responsibility. However, the competent authority will only be effective if its roles and responsibilities are clear, it is adequately resourced and it has effective powers to ensure implementation of flood risk duties and adherence to national programmes and procedures. It will be important when ensuring consistency is obtained in assessing affordability and balancing environmental and social benefits, care is taken not to introduce unnecessary bureaucracy. Our experience has found that focus on delivery outcomes can be lost whilst too much attention is paid to trying to reach the appropriate balance resulting in valuable resources being diverted into studies rather than implementing solutions.

Local Authorities hold a great deal of local flood risk knowledge and are the only locally responsible, elected body with which flood effected residents can voice their concerns and views with some degree of effectiveness. Royal Haskoning believe there are many advantages to having such a direct consultation and accountability with the community and their representatives as against other systems such as in England where Local Authorities are just one of a list of statutory consultees. Understanding local needs is crucial in delivering SFM. We therefore advocate that Local Authorities should retain a key role in flood risk management in Scotland. Royal Haskoning believe the catchment response to flood risk management is the correct approach but it should be recognised that river catchments and Local Authority boundaries do not always tie up. Where river catchments extend over several Local Authority boundaries there should be a duty on the relevant Local Authorities to join resources and produce a single integrated Area / Catchment plan.

Although consideration should be given to adopting Sir Michael Pitts recommendation (for England & Wales) to require Local Authorities to develop in house flood risk management capabilities, this may be more difficult to implement across the smaller Authorities in Scotland due to cost. Nonetheless there should be a means by which Local Authorities have access to good practice and thereby improve the advice given to the public.



**ROYAL HASKONING**

**Q4. Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?**

SEPA are the only organisation in Scotland with the relevant flood risk knowledge capable of taking a national lead on implementing the Floods Directive. Therefore Royal Haskoning agree with Q4. SEPA should be responsible for determining the Area Flood Management Plans that need developing by the Local Authorities and ensuring the Local Authorities deliver. This will ensure national coverage without any gaps.

Royal Haskoning consider there to be significant resource issues associated with giving SEPA these additional National responsibilities. Against a background of a general skill shortage in flood risk management, care will need to be taken to ensure adequate expertise is secured in SEPA relating to hydrology, flood hydraulics, asset management, economic appraisal, engineering including geotechnics, and geomorphology. It will be imperative for the successful delivery of SFM that obtaining timely advice from technical experts from within SEPA can be established within months rather than years.

**Q5. Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?**

Royal Haskoning agree that the process set out is sound.

**Q6. Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?**

Where a catchment spans two or more Local Authority areas there should be a duty on the relevant Local Authorities to determine and agree on a lead authority. SEPA should have the power to designate a lead if the Local Authorities sharing a catchment area are unable to agree on who leads the flood risk management process, although this should be deemed to be a last resort.

**Q7. Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?**

Ideally there would be a single consistent responsible authority. However it is recognized that a number of organizations, in particular Local Authorities, Scottish Water and the Forestry Commission, may own considerable assets in a catchment and therefore should be identified as responsible authorities.

**Q8. Which other bodies should be identified as responsible authorities?**

See answer to Q7 above.

**Q9. Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?**

Flood Advisory Groups are a sensible way of ensuring multi agency input and buy-in into area and local flood risk management. Local Authorities should be encouraged to liaise with the Flood Advisory Groups but the capacity of the Flood Advisory Groups should be an advisory one rather than decision making.

**Q10. Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?**

The concept of stakeholder forums is good but needs careful co-ordination and management. Will the Scottish Government, SEPA or the Local Authority be duty bound to provide a representative to the stakeholder forum to provide guidance?

**Q11. Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?**

Agreed. A 6 yearly cycle of review and improvement should also be adopted.

**Q12. Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?**

Yes. Ministerial approval would add weight and credibility to the plans aiding implementation. However, there should be a time limit on Ministerial approval (3 months for example). This will help maintain momentum in the FRM process.

**Q13. Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?**

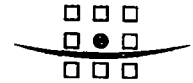
Royal Haskoning believe that the integration of urban drainage plans forms an important part of developing fully integrated flood risk management plans. However, it is recognised that this task is potentially complex and onerous (resource and cost intensive). It might be viewed that this is too ambitious for the first round of FRM Plans and that integration of urban drainage plans should be included in the second cycle.

**Q14. Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?**

If sustainable flood risk management is to be achieved Flood Risk Management Plans should be a key input into Local Development Plans and dictate where (and more importantly where not) development takes place. The flood risk framework set out in SPP7 should be strengthened so that developments of certain types cannot by law take place in areas of defined flood risk. Flood Risk Management Plans should delineate areas of flood risk (at various probabilities / return periods). This information should then be incorporated into Local Development Plans and provide Local Authority Planning Officers with the information to determine where development can and cannot take place.

**Q15. Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?**





**ROYAL HASKONING**

We believe that one process leading to both flood risk and planning approvals can only bring benefits through eliminating duplication of tasks, streamlining consultation processes, and reducing overall costs. It should also provide for a clearer understanding of the legal process by all stakeholders.

**Q16. Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?**

Yes. We believe that it is an exception where features of a scheme do not require planning permission and therefore sustaining a requirement for Ministerial confirmation avoids introducing grey areas in an otherwise streamlined process.

**Q17. Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?**

We believe that timescales could be better achieved by greater requirement being placed on the promoter of the scheme undertaking effective consultation and presenting that evidence to the Scottish Government.

**Q18. Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?**

This option has a number of merits and would streamline the process compared to current procedures. Benefits would arise from the integration with the local planning process, closer alignment with urban drainage issues, and most importantly administering a process by those who have the more general accountability for the welfare of the community.

**Q19. What would be the appropriate timescales for notification and response?**

The existing 3 month notification and response timescale still seems appropriate.

**Q20. Would it be appropriate for such a process to carry deemed planning consent?**

We see benefits in having some aspects of the process falling into permitted development. However, we recommend that careful consideration is made as to how this can be practically achieved such as making better use of the strategic planning process and the application of the CAR Regulations.

**Q21. How should the issue of technical expertise and capacity to ensure the necessary technical standards are observed, be addressed?**

We refer you to the answer we gave in Q3 above.

**Q22. Are there any additional alternatives to the options outlined above which would simplify procedures?**

No.

**Q23 Do you consider local authorities' powers are sufficient to take necessary action to avert danger to life and property?**

We do not believe we are in the best position to answer this question.

**Q24. Do you agree that streamlining the CAR and flooding/planning processes can be managed through better guidance?**

In conjunction with other measures being introduced by this Bill then better guidance is an essential means by which the full value of change can be obtained.

**Q25. Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?**

We see that the greatest opportunity for joined up regulation exists in moving on from the most sustainable option approach to a principles driven collaboration between the stakeholders. We are concerned that if this does not happen scheme approvals will get bogged down with individual organizations pursuing their own agendas and thereby increasing cost and time to the process.

**Q26. Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government should consider?**

Not within the timescales proposed for introducing the Flooding Bill.

**Q 27. Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?**

Yes. National guidance on the aims, objectives and content of biennial reports would aid consistency between Local Authorities, share best practice, and improve the quality and effectiveness of the reports in highlighting flood risk issues.

**Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?**

The introduction of this Flooding Bill gives a once in a generation opportunity to significantly improve flood risk management and subject to our comments above, particularly regarding the sustainable option, the proposals are a positive step in the right direction.

**Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?**

Yes. We believe such a duty would create the right level of awareness of flooding issues within the Local Authority decision making and planning process.

**Scottish Government****Future of Flood Risk Management – Consultation April 2008****Submission of Response from the Scotland & Northern Ireland Forum for Environmental Research (SNIFFER)****1. Background on SNIFFER's role in flood risk management**

The Scotland & Northern Ireland Forum for Environmental Research (SNIFFER) is funded by the Scottish Government to provide a flood risk management research and knowledge management service on behalf of Scottish stakeholders.

SNIFFER works in close partnership with the Scottish Government, Scottish Environment Protection Agency, Scottish Water, Scottish local authorities, Scottish Environment Link and other stakeholders to:

- Identify, fund and deliver flood research projects of relevance and interest to Scottish stakeholders.
- Host an annual Flood Risk Management Conference to promote and disseminate new research of relevance to Scottish stakeholders from Scotland, UK and Europe.
- Support the Scottish Government's input to UK and EU research initiatives, ensuring representation of Scottish interests and dissemination of outputs to Scottish stakeholders.
- Liaise regularly with other research funders in the UK, Republic of Ireland and Europe to minimise duplication of effort and encourage partnership working to oversee the delivery of mutual research priorities where possible.

One of the key tools for the delivery of the knowledge management element of this service is SNIFFER's RISE website ([www.sniffer.org.uk/riase](http://www.sniffer.org.uk/riase)). This regularly updated website provides:

- information on the **legislative framework** for flood risk management within Scotland.
- Details of **statutory roles and responsibilities** for flood risk management within Scotland.
- A **knowledge inventory** (a searchable on-line database) of flood risk management research from across the UK and Europe of relevance to Scotland.
- A **'What's new page'** which provides details of relevant research, news and events of interest to the flood risk management community within Scotland.
- **Links** to other websites of relevance and interest.

SNIFFER's flood risk management service has a successful track record of delivery over the last three years. SNIFFER has built a good working relation with Scottish stakeholders who are keen to work in partnership with us to deliver research of mutual benefit. SNIFFER's flood risk management service is therefore ideally placed to undertake research required to inform and support the Scottish Government's implementation of any new flooding legislation.

## **2. Submission of consultation response from SNIFFER in response to Consultation questions**

### **Overview - Climate Change and flooding**

SNIFFER support the statements made in paragraphs 1.3 and 1.4 regarding the potential impacts of future climate change, such that Scotland may expect to experience more severe rainfall events.

SNIFFER also support the recognition of the future role of the forthcoming Scottish Climate Change Adaptation Strategy (para 1.5) in identifying priority actions which must be taken to prepare for the projected impacts of future climate.

SNIFFER also provides the secretariat for the Scottish Climate Change Impacts Partnership (SCCIP). SCCIP is an initiative that brings together stakeholders in Scotland to collectively address and prepare for the impacts of climate change. SCCIP was commissioned by the Scottish Government to provide a research and knowledge management service, including the new SCCIP website launched in September 2007 ([www.sccip.org.uk](http://www.sccip.org.uk))

SCCIP was established to "increase the resilience of organisations and infrastructure in Scotland to meet the challenges and opportunities presented by the impacts of climate change". Members of the small SCCIP Development Group include representatives from Scottish Government, Scottish Environment Protection Agency, UKCIP, Sustainable Scotland Network and SNIFFER. There are approximately 300 stakeholders currently registered with SCCIP and this number is steadily increasing in response to the increased awareness of climate change adaptation issues in Scotland.

The current work programme for SCCIP (2008/09) has a strong focus on providing support and tools to stakeholder interests across Scotland. Key adaptation projects include:

- Local Climate Impacts Profiles for Local Authorities
- Training courses on UKCIP08 Climate Change scenarios
- Further engagement with sectors this year to identify their support and capacity building needs.

### **Specific Questions**

Please note that some of the responses to questions are based on feedback from attendees at SNIFFER's annual FRM Conference held in February 2008. Full details of the breakout session feedback are available in the conference record which is available to download from <http://www.sniffer.org.uk/rise/events.asp>

Q1. SNIFFER agrees in principle with the definition provided.

Q2. The definition provided is well understood within the technical flooding community. It is also important that it is understood by all stakeholders, particularly those directly affected or at risk from flooding.

Q3. SNIFFER agrees with this conclusion.

Q4. It would be sensible for a single competent authority in Scotland to hold a national remit for implementing the Floods Directive and given SEPA's current responsibilities for developing and maintaining the flood maps, this duty could sensibly sit with SEPA. This responsibility would also sit well with SEPA's current responsibilities under the WEWS Act 2003 (particularly in terms of River Basin Development Plans).

Q5. No specific comment.

Q6. No specific comment.

Q7. SNIFFER agrees with this suggestion. These organisations were identified as key stakeholders by attendees of SNIFFER's annual FRM Conference in February 2008.

Q8. No specific comment.

Q9. The following points were raised by attendees of the SNIFFER FRM Conference 2008:

- There is a need to ensure capacity building within Local Authorities to make resources available to people on the ground and to improve joint working and resource sharing – authorities need education of what measures are out there and what works or is proven.
- Information needs to move both ways between relevant stakeholders and should be available in a format which is understandable to the recipient. There are issues of who takes on responsibility for improving sharing of data where authorities are working together.

Q10. The SNIFFER annual FRM Conference 2008 discussions raised the following key points of relevance to this question:

- There is a strong need for stakeholder groups
- Could a unified Flooding Body act as a resource for all stakeholders?
- There is a need to seek involvement of other organisations involved in direct support, such as Fire and Rescue Services and the National Flood Forum

Q11. A process similar to River Basin Management Planning would seem to be the most sensible approach to flood risk management planning. Lessons may need to be learnt from the early years of RBMPs to allow a streamlined process to be put in place early. Strong links between groups tasked with preparing the two sets of plans will be required to ensure consistency and compromise is reached.

Q12. No specific comment.

Q13. No specific comment.

Q14. No specific comment.

Q15. No specific comment.

Q16. No specific comment.

Q17. No specific comment.

Q18. No specific comment.

Q19. No specific comment.

Q20. No specific comment.

Q21. No specific comment.

Q22. No specific comment.

Q23. No specific comment.

Q24. No specific comment.

Q25. No specific comment.

Q26. No specific comment.

Q27. The format of the biennial reports produced by local authorities under the Flood Prevention and Land Drainage (Scotland) Act 1997 needs to be standardised. These reports could potentially contain a significant amount of useful information and data which could be centrally collated and analysed to inform future flood risk management decisions by the statutory bodies and the information stored in a central database.

SNIFFER has in partnership with the Scottish Government, SEPA, Scottish Water and Scottish local authorities, recently completed some research which has developed a proposed methodology (and made recommendations as to responsibilities) for collecting and centrally storing data and information after flood events in Scotland.

A copy of the report can be downloaded at [www.sniffer.org.uk/search.asp](http://www.sniffer.org.uk/search.asp) (search on SNIFFER Code 'FRM07' Title: Development of a methodology (and identification of responsible parties) for capturing information and data after a flood event in Scotland).

The key recommendations from the research which SNIFFER would like to flag are:

- The developed data collection methodology is based primarily on the storage of metadata records within a National Flood Database (NFD). It is recommended that:
  - all data collecting organisations compile a record for all reported flood events which details the type, quantity and quality of the data that has been collected.
  - SEPA act as the coordinating body who collates and holds the metadata records on the NFD. All source data will be retained by the responsible bodies.
  - A data collection framework be implemented which sets agreed thresholds for the collection and archiving of flood data. The moderate and nuisance categories within the framework represent business as usual for the responsible bodies. It is recommended that additional 'live' data is collected during and immediately after a major flood.

It should be noted that although this research was funded by the SNIFFER partners the methodology has not been officially adopted or endorsed by them at this stage (given the ongoing discussions as to potential new roles and responsibilities in flooding in Scotland).

Q28. SNIFFER agrees in principle that the proposals suggested will improve FRM and ensure Scotland is equipped to implement sustainable flood management.

Q29. The key mechanism by which communities will develop resilience to flooding will be through capacity building and education. Key points raised at the SNIFFER annual FRM conference 2008 included:

- There is a need to look at how information is fed back to communities and how the public are heard – we need to bring in the community at the catchment planning process and build in education and understanding of the issues.
- People at risk from flooding need to be made more aware of the risks and need to be educated as to their responsibilities and options.
- We need wider publicity /engagement with issues – need proactive flooding stories in TV programmes etc to help education of the mechanisms of what individual actions can result in increased flood risk (eg paving gardens)
- Mechanisms for engaging with communities need to be established: e.g. risk register databases, emergency evacuation plans, community planning partnerships.
- Collation of lessons learnt from engaging the public **before** an event and **after** an event is needed – what worked; what didn't.

It needs to be established whether Local Authorities are best placed to deliver this directly or whether there is an opportunity for them to work in partnership with other organisations such as Fire and Rescue Services and the National Flood Forum to promote measures to alleviate flooding.

045

RESPONDENT INFORMATION FORM Annex A

The Future of Flood Risk Management in Scotland

Please complete the details below and return it with your response. This will help ensure we handle your response appropriately. Thank you for your help.

Name: Ross Gardiner

Postal Address: Fisheries Research Services, Freshwater Laboratory, Pitlochry, Perthshire PH16 5LB

E-mail: [REDACTED]

Telephone number: [REDACTED]

1. Are you responding:

(a) as an individual ( go to Q2a/b and then Q4 ) No

(b) on behalf of a group/organisation ( go to Q3 and then Q4 ) Yes

On behalf of Groups or Organisations

3. The name and address of your organisation will be made available to the public (in the Scottish Government library and/or on the Scottish Government website).

Are you also content for your response to be made available? Yes

Sharing Responses / Future Engagement

4. We will share your response internally with other Scottish Government policy teams who may be addressing the issues you discuss. They may wish to contact you again in the future, but we require your permission to do so.

Are you content for the Scottish Government to contact you again in the future in relation to this consultation response? Yes

Please indicate which questions or parts of the consultation paper you are responding to as this will aid our analysis of the responses received:

Flooding Yes

Reservoirs Limited comments only

Q1. Do you believe the definition of SFM is helpful and of practical benefit to flood risk management?

**Yes. However, it may not always be possible to achieve "the maximum possible social and economic resilience" if appropriate provision to protect the environment is also to be made.**

Q2. Do you think the definition is clear and simple to understand?

**Not particularly. Maybe something like "Sustainable flood management is flood management which provides a high level of protection against flooding and the results of flooding, while minimizing environmental impact." would be better.**

Q3. Do you agree with the conclusion as set out in paragraph 3.17?

Yes

Q4. Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?

Yes

Q5. Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?



**Yes. However it would be useful to mention the need for measures to be sustainable. For example in 3.27 "sustainable" could be inserted in front of "measures"**

**Q6. Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?**

**Ministers or SEPA should have the power to designate a lead authority within a local area**

**Q7. Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?**

**Yes – but in the case of Scottish Water, the Forestry Commission, and possibly SNH only for specific sites in which they have an interest.**

**Q8. Which other bodies should be identified as responsible authorities?**

**No suggestions. The input of Scottish and Southern Energy and Scottish Power will be important, although it would not necessarily be appropriate to identify them as responsible authorities.**

**Q9. Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?**

**Yes**

**Q10. Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?**

**Hopefully that will be the case, but it is not clear how the stakeholder forums will interact with the flood advisory groups.**

**Q11. Do you agree that the Bill should set out a process similar to that for River Basin Management Planning for the preparation by SEPA of area flood risk management plans?**

**Yes**

**Q12. Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?**

**Yes**

**Q13. Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?**

**Yes**

**The Future of Flood Risk Management in Scotland**

**Q14. Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?**

**There should certainly be a stronger linkage, this is probably the best tool for sustainable flood management in the future – i.e. to avoid building where there is a significant flood risk.**

**Q15. Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?**

**No view to state**

**Q16. Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?**

**No view to state**

**Q17. Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?**

**No view to state**

Q18. Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?

**No view to state**

Q19. What would be the appropriate timescales for notification and response?

**No view to state**

Q20. Would it be appropriate for such a process to carry deemed planning consent?

**No view to state**

Q21. How should the issue of technical expertise and capacity to ensure the necessary technical standards are observed, be addressed?

**No view to state**

Q22. Are there any additional alternatives to the options outlined above which would simplify procedures?

**No view to state**

Q23. Do you consider local authorities' powers are sufficient to take necessary action to avert danger to life and property?

**No view to state**

Q24. Do you agree that streamlining the CAR and flooding/planning processes can be managed through better guidance?

**Hopefully that would be the case**

Q25. Do you think there is anything further SEPA, the Scottish Government or others should be doing to promote joined-up regulation?

**Not that comes immediately to mind**

Q26. Do you think that there is an alternative approach to simplifying the process of promoting flood measures to those discussed above which the Government should consider?

**No alternative proposals to make**

Q27. Do you agree that the form and content of the biennial reports should be more systematic, and subject to direction from Ministers?

**No view to state**

Q28. Do consultees agree that the proposals as outlined will improve flood risk management and ensure Scotland is equipped to implement sustainable flood management?

**"Yes" to the first part. "Hopefully, yes" to the second part. In connection with the second part, although there is mention of the need to consider the consequences of flood management on the environment in 3.87, the measures put in place can have adverse consequences both locally and more widely on the environment, including the animal and plant communities. There is a need to make clear in the text the additional responsibility to reduce these adverse environmental consequences as far as possible, for example using softer options to protect riverbanks, rather than hard engineering solutions.**

Q29. Do consultees feel that this is enough to ensure that flood risk is addressed or should local authorities have a new duty to promote measures to alleviate flooding?

**See previous comment. Otherwise, no view to state.**

#### **RESERVOIR SAFETY**

Q30. Do you believe enforcement responsibilities under the Reservoirs Act 1975 should be transferred to a single national body?

**Looks a sensible option**

Q31. If so, should it be SEPA or another as yet unidentified body?

**No view to state**

Q32. Are you content with the proposals for dealing with reservoir flood maps under the provisions of the Floods Directive, or do you think that there should be a statutory duty on reservoir undertakers to prepare reservoir inundation maps and plans, similar to the duty in the 2003 Water Act for England and Wales?

**No view to state**

Q33. Do agree that enforcement powers be extended and post incident reporting included as an additional requirement?

**No view to state**

Q34. Views on crown application and any other comments?

**No view to state**

#### **Other comments**

**Truly sustainable flood management will be very difficult to achieve and will require the active involvement of many parties, including fish and fisheries interests. The list in Annex C of organizations who are being approached for their views is very short for such an important and wide reaching issue. Measures put in place to manage flooding can also have adverse direct and indirect consequences on fish and fisheries, for example. Organisations such as the Association of Salmon Fishery Boards, the Rivers and Fisheries Trusts of Scotland, the Salmon and Trout Association and the Scottish Anglers' National Association may be able to provide useful additional comment. If the consultation document had considered in more detail how sustainable flood management might be achieved, it would have been clear there is a much broader range of interested parties than those considered.**

046

**From:** [REDACTED]  
**Sent:** 21 April 2008 17:48  
**To:** Flooding, Erosion and Reservoir Safety  
**Subject:** Consultation Response

\*\*\*\*\*  
 This email has been received from an external party and  
 has been swept for the presence of computer viruses.  
 \*\*\*\*\*

## The Future of Flood Risk Management in Scotland

### RESPONDENT INFORMATION DETAILS

**Name:** [REDACTED]  
**Organisation:**  
**Address:** [REDACTED]  
**Postcode:** IV30 5PP  
**Email:** [REDACTED]  
**Telephone Number:** [REDACTED]  
**Responding as:** An individual  
**Individual Permission:** Yes  
**Confidentiality:** Yes, make my response, name and address all available  
**Group or Organisation:** Not Supplied  
**Share Response Permission:** Yes

### Consultation Questions The Future of Flood Risk Management in Scotland

<b>Question 1: Do you believe the definition of SFM is helpful and of practical benefit to flood risk management?</b>	It really makes no difference by what name or definition you use as some one will most certainly put another interpretation to it.
<b>Question 2: Do you think the definition is clear and simple to understand?</b>	NO
<b>Question 3: Do you agree with the conclusion as set out in paragraph 3.17?</b>	N/C

<p><b>Question 4: Do you agree that there should be a single competent authority with a national remit for implementing the Floods Directive, and that it should be SEPA?</b></p>	<p>YES &amp; NO I make this statement after looking at the flood plain maps of Moray, I find most to be at least 40 years out of date when rural drains-ditches were hand dug and were usually shallow and narrow. Since the 1960s mechanical/hydraulic diggers became the choice, as did the ownership of many rural/sporting estates from the local laird to trust funds, investments etc. and were managed by academics who made full use of all the grants which were at their disposal for drainage, fencing, and forestry. The effect being a hand dug ditch would overflow @ say 1m<sup>3</sup> per second to be capable of 20m<sup>3</sup> ps. This was going on in most of the river Lossie catchment area.</p>
<p><b>Question 5: Do you agree that this is a sound basis for the development of Local Flood Risk Management Plans? If not what alternative do you propose?</b></p>	<p>The only way to progress is by using the local knowledge of the population in any one scheme then use the suitably qualified engineers to calculate the loading of any one dam even if this means several small structures using local natural products, this also allows for early catchment of localised rainfall which appears to be the way climate change is heading. But I can recall one local flood approx 50 years ago which washed away 2 bridges about half a mile apart but caused no other damage.</p>
<p><b>Question 6: Should Ministers or SEPA have the power to designate a lead authority within a local area, or should it be left to the partners?</b></p>	<p>Ministers</p>
<p><b>Question 7: Do you agree that Local Authorities, Scottish Water, the Forestry Commission, and SNH should be identified as responsible authorities?</b></p>	<p>In Moray I must state the above mentioned authorities (with the exception of SNH) are far too inward looking to achieve what's best for the area. Therefore I disagree.</p>
<p><b>Question 8: Which other bodies should be identified as responsible authorities?</b></p>	<p>I honestly believe Scottish Ministers should appoint a totally independent body for these matters.</p>
<p><b>Question 9: Do you agree that responsible authorities should have a duty to work together within Flood Advisory Groups to produce plans?</b></p>	<p>Ref Q7</p>
<p><b>Question 10: Do you agree the proposals are sufficient to support wider stakeholder and community engagement in the flood risk management planning process?</b></p>	<p>NO</p>
<p><b>Question 11: Do you agree that the Bill should set out a process similar to that for</b></p>	<p>RBMP I have never heard of this but if it exists</p>

<b><i>River Basin Management Planning for the preparation by SEPA of area flood risk management plans?</i></b>	it has never been implemented in this area to my knowledge.
<b><i>Question 12: Do you agree that Ministers have the power to approve, reject or modify Area Flood Risk Management Plans?</i></b>	YES
<b><i>Question 13: Do you think that integrated urban drainage plans should be included as part of a Local Flood Risk Management Plan?</i></b>	YES
<b><i>Question 14: Should Flood Risk Management Plans inform the way that development plans are prepared, or should there be a stronger linkage such as a requirement on planning authorities to show that they have regard to the FRMPs?</i></b>	A stronger linkage is essential this may stop new developments on flood plains or even at risk areas.
<b><i>Question 15: Do you think that the granting of deemed planning permission at the end of the statutory process for flood risk management will deliver a more streamlined approach to the delivery of flood risk management?</i></b>	NO
<b><i>Question 16: Should Ministerial confirmation be made necessary even where features of a scheme do not require planning permission?</i></b>	YES
<b><i>Question 17: Is the present procedure for Ministerial confirmation satisfactory for this new purpose or are there revisions e.g. to timescales which should be considered?</i></b>	There should be timescales it is almost 11 years since the Elgin floods of 1997 & there are hundreds of people put in a state of fear every time the river starts to rise, in 2002 for example there was very little rain in Elgin but Dallas Knockando Rothes experienced a downpour. Although I cannot comment on Rothes I can assure you there are many natural sites suitable for dams between the source of the rainfall & Elgin. Only SNH have openly stated the dam option was dismissed too easily.
<b><i>Question 18: Do you think that the option to rely on a local authority based process in a similar way as other local authority development activity should be taken forward?</i></b>	NO
<b><i>Question 19: What would be the appropriate timescales for notification and response?</i></b>	Notification? but response and action should never take 11 years
<b><i>Question 20: Would it be appropriate for such a process to carry deemed planning consent?</i></b>	NO
	Expertise is required after the best solution is found & it is the Scottish Ministers wishes to