

## FLOODING ISSUES ADVISORY COMMITTEE

### WHAT IS SUSTAINABLE FLOOD MANAGEMENT?

#### Purpose

1. This paper presents the work of Flooding Issues Advisory Committee (FIAC) on defining sustainable flood management (SFM). It proposes a definition, objectives and principles as well as indicators by which SFM might be measured. This is an abbreviated version. The full text can be found on the FIAC website at: <http://www.scotland.gov.uk/Resource/Doc/1223/0028633.pdf>.

#### Background

2. Under section 2 of the Water Environment and Water Services (Scotland) Act 2003 (“the 2003 Act”), Scottish Ministers, SEPA and the “responsible authorities” have a duty to carry out their functions in compliance with the requirements of the EC Water Framework Directive. (An order, defining the ‘responsible authorities’, came into force on 1 April 2006 and includes local authorities and Scottish Water.) They also have a duty, so far as is consistent with relevant enactments or the designated functions in question, and having regard to social and economic impacts:

“to promote sustainable flood management, and act in the way best calculated to contribute to the achievement of sustainable development.”

3. In practice this means that local authorities need to take account of their requirement to promote SFM when carrying out flood prevention functions under the Flood Prevention (Scotland) Act 1961. However the 2003 Act does not define SFM. To ensure that this provision in the 2003 Act is implemented effectively and consistently it is essential that SFM is defined in pragmatic, measurable, universally accepted and clearly understood terms.

#### Flooding Issues Advisory Committee

4. The Flooding Issues Advisory Committee (FIAC) was set up in spring 2005 to provide advice to the Executive on flood risk management issues at a strategic level; this included defining sustainable flood management. Outputs from FIAC are presented in the paper *What is Sustainable Flood Management?* and are intended to be applicable from a strategic level right down to a scheme/project level.

#### *Definition of sustainable Flood Management*

5. FIAC proposes a definition of SFM, which it believes will be easy to understand and would meet the needs of Ministers, SEPA and all responsible authorities under the 2003 Act, as follows:

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

(\* '*resilience*' means: '*ability to recover quickly and easily*'. The Scottish Government uses it to deliver the 'four As': *Awareness* + *Avoidance* + *Alleviation* + *Assistance*.)

(\*\* *flooding* means all types of flooding: surface (pluvial), sewer, river, groundwater, estuarine and coastal)

### ***Objectives for sustainable flood management***

6. FIAC proposes high level objectives to:

- act as a long-term *vision* and also encourage interactive learning and education on flood risk management;
- provide *test criteria* for current or future policies and legislative changes with *principles* for practical guidance;
- develop *measurement indicators* to assess progress enabling the impacts of options to be evaluated more effectively at national and local scales;
- provide an '*audit trail*' for detailed decision-making to consistently justify and communicate decisions;
- improve the quality of decision-making by ensuring that all stakeholders are involved in the process; and
- ensure that links are made between flood management, Development Plans (urban and rural), River Basin Management Plans and Coastal Zone Management Plans, Strategic Environmental Assessments, Scottish Biodiversity Strategy and plans to conserve the natural heritage.

7. FIAC proposes that the **overall** objective of SFM should be **to meet needs for flood resilience**. To meet this overall objective, the following needs must be **integrated**:

**Social** – enhance community benefit with fair access for everyone;

**Environmental** – protect and work with the environment, with respect for all species, habitats, landscapes and built heritage;

**Economic** – deliver resilience at affordable cost with fair economic outcomes;

**Future generations** – allow for future adaptability, with a fair balance between meeting present needs and those of future generations.

### ***Principles of sustainable flood management***

8. FIAC also proposes 8 principles to set out how the objectives might be delivered:

[***Strategic Approach***] SFM should reflect a strategic approach both nationally (across Scotland) and locally (within River Basin Management Plans), with phasing where appropriate. It should take account of the 2003 Act principles of co-ordinated management to achieve relevant objectives for all water bodies, and the planning policy contained in SPP7. It should use strategic environmental assessment and sustainability appraisal as they are introduced into Scottish methodology.

**[Responsibilities]** All stakeholders should be actively engaged in and share responsibility for achieving SFM. They are expected to collaborate constructively to meet SFM objectives, with the lead taken by the appropriate party(ies) according to their statutory, legal, common law or commercial role(s).

**[Options Appraisal]** Sustainability issues should be considered from the earliest stages of investigating options. The options considered for flood management should include, through to full evaluation, at least one option that represents a ‘most sustainable benchmark’, addressing all four ‘A’s: Awareness, Avoidance, Alleviation and Assistance, even if regulatory or legal barriers appear to block implementation<sup>1</sup>. Decision-making tools will include, but not be limited to, Cost Benefit Analysis and should make the ‘values’ applied explicit.

**[Uncertainty]** A long-term view of sustainability means acknowledging and taking account of current uncertainties - including current data and models - and future uncertainties. Flood risk should be expressed clearly. It also requires explicit consideration of the implications of flood events that exceed design limits.

**[Multiple Benefits]** SFM should seek opportunities for multiple benefits, but also cover costs and frequency of loss (economic, rural, landscape or amenity enhancement), wherever possible and seek other relevant funding sources.

**[Openness]** The whole SFM process should be transparent; and there should be a common, shared source of information, from which all stakeholders can access and learn.

**[Democracy]** SFM should promote effective community engagement. Decisions should be taken at the local level, as far as possible, and reflect local community ‘Agenda 21’ or similar sustainability objectives. Parties should plan and manage to achieve community consents without the cost and delay of a Public Inquiry.

**[Simplicity]** Implementation of SFM should be understandable, aim for ease of delivery, and promote continual learning, and sharing of knowledge.

### ***Measurable indicators for sustainable flood management objectives***

9. While the definition, objectives and principles are written in general terms as an introduction to SFM, FIAC has also suggested indicators to measure the performance of SFM. Full details of the measurable indicators are presented in the FIAC paper *What is sustainable flood management?*

10. The FIAC proposals for defining sustainable flood management, along with a Strategic Environment Assessment, will be released for public consultation later this year.