

NATIONAL TECHNICAL ADVISORY GROUP ON FLOODING ISSUES

SUSTAINABLE FLOOD MANAGEMENT SUB-GROUP

DRAFT DEFINITION AND PRINCIPLES OF SUSTAINABLE FLOOD MANAGEMENT

Purpose

1. This paper is for discussion at the Sub-Group meeting on 22 April and presents a draft definition of “sustainable flood management”, within the meaning of section 2 of the Water Environment and Water Services (Scotland) Act 2003 (“the 2003 Act”), for discussion. It also offers a set of draft objectives and principles for Members to consider.

Background

2. Under section 2 of 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 EU Water Directive. They also have a duty,

in so far as is consistent with relevant enactments or designated functions in question,

- 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 a local authority – as a responsible authority under the 2003 Act - must take account of the requirement to promote sustainable flood management when carrying out its flood prevention functions under the Flood Prevention (Scotland) Act 1961. However no definition of “sustainable flood management” is offered. To ensure that this provision in the 2003 Act is implemented effectively and consistently it is essential that a pragmatic, measurable, universally accepted and clearly understood definition is developed.

4. We have a suggestion from Prof. Ainger that we use the term ‘resilience’ (as used by the National Flood Forum), to summarise the overall response to a flood event. Its dictionary definition is ‘*able to recover quickly and easily.*’ We then link this with the ‘four As’ from the Scottish Executive’s *Statement of Commitments to reduce the risks and impact of flooding* (copy attached at Annex A) by saying that, for sustainable flood management in Scotland:

‘Resilience’ = Awareness + Avoidance + Alleviation + Assistance

Draft objectives

5. It is important that we first identify the objectives behind promoting sustainable flood management. In line with the Executive’s objectives for overall sustainable development, we suggest the following:

- to act as a long-term vision by ensuring that our actions and attitudes today do not limit our quality of life in the future;
- to take a whole-life approach to cost appraisals;
- [to make the link between flood management and river basin planning clearer;]

- to involve all stakeholders in the process to improve the quality of decision making, allowing us to assess the environmental impacts of our options more effectively, and
- to develop indicators to allow us to measure and compare progress and assess proposed flood prevention schemes.

6. These are high level objective statements and Members will wish to discuss how these might be broken down and measured. Prof. Charles Ainger has produced a separate paper (NTAG2004(21)), which Members will also be asked to discuss and consider at the Sub-Group meeting on 22 April. This paper proposes that we break down the high level objectives into four headings - social, environmental, economic and future generations and suggests how we might measure progress under each of these headings.

Draft principles

7. Members agreed at the first Sub-Group meeting in February that any definition of sustainable flood management must be underpinned by a set of principles, which should cover the four outcomes, social, environmental, economic and future generations. We propose the following :

- a) Sustainability should be one of the strategic aims when investigating flood risk management and should be considered in all stages of the flood management project appraisal process.
- b) A long-term view of sustainability means taking account of climate change impacts, to ensure that the needs of future generations are met. It also means allowing for future uncertainties and giving future generations comparable opportunities for them to meet their own future, changing, needs.
- c) Resources should be used efficiently.
- d) A whole-life view of the life costs and benefits of the proposed approach to the consideration of flood risk management options is essential.
- e) Flood management options must take a strategic whole-catchment approach to flood risk management.
- f) Furthering the conservation of biodiversity should be a key element of sustainable flood management.
- g) The 'do-nothing' option is a critical step in the process of identifying [sustainable] options.
- h) Designing with the grain of natural processes can improve both the resilience and sustainability of defences. It can also be more cost-effective in some instances.
- i) Each case will require its own assessment of the sustainability of the solution to flood risk. [Perhaps with some sort of qualification built in to recognise that there may be a number of individual cases within a single catchment, which can be investigated at the same time?]

8. It would be helpful to have a discussion on the need to also include “polluter pays” principle and how this might be measured and applied, covering private and public angles.

Draft definition

9. “Sustainable flood management” within the meaning of section 2 of the 2003 Act is to:

“Take a long-term, whole life and catchment-based approach to solutions to provide the maximum possible social and economic *resilience* against flooding; working with the grain of natural processes to minimise environmental impact, in a way which is equitable between members of our present and future communities.”

Thanks

10. NTAG Secretariat would like to thank Prof. Charles Ainger for his input to this paper.

Conclusions

11. **Members are asked to consider, discuss and where necessary revise the:**

- **proposed ‘Resilience’ = Awareness + Avoidance + Alleviation + Assistance formula at paragraph 4 above;**
- **draft objectives at paragraph 5 above;**
- **draft principles at paragraphs 7 and 8 above, and**
- **draft definition at paragraph 9 above.**

**NTAG Secretariat
April 2004**

EXECUTIVE STATEMENT OF COMMITMENTS TO REDUCE THE RISKS AND IMPACTS OF FLOODING

Awareness

1. We will seek to improve awareness of the risks of flooding through the provision of better flood risk information and additional flood warning systems.

Avoidance

2. We shall publish revised national planning policy intended to strengthen the ability of planning authorities to prevent unsuitable further development where there is significant flood risk.

Alleviation

3. We are investing £40 million over the next three years to reduce flood risk for 1850 properties.

4. We will seek to reduce the risk of sewer flooding by continuing to encourage the use of sustainable urban drainage systems and working with Scottish Water to ensure that such systems are properly maintained.

5. We will seek to manage flood risk by improving national guidance and administrative procedures for promoting new flood alleviation schemes.

6. We will encourage joint working between local authorities, SEPA and Scottish Water to improve flood risk management and will establish a national technical advisory group.

Assistance

7. We are helping those who might be affected by flooding by encouraging the take up of insurance.

8. We will give better support to those affected by flooding.

**Scottish Executive
February 2003**