

ENVIRONMENT, PLANNING AND TRANSPORT COMMITTEE

Date: Wednesday 27 February 2002
Time: 2.00 to 4.30 pm
Venue: Committee Room 3, National Assembly Building

COMMITTEE REPORT ON FLOODING ISSUES**Purpose**

1. To update the Committee on progress on flooding issues.
2. To seek the Committee's views on the Consultation Paper relating to the Review of Flood and Coastal Defence Funding Mechanisms and Administrative Arrangements

Background

3. In December 2000 I reported to the Committee (Ref EPT-14-00) regarding the catastrophic floods which occurred in autumn 2000. In that report I described ongoing and proposed initiatives aimed at improving the way flood defence issues were considered and delivered. Progress against each of these initiatives is highlighted in Annex 1.
4. I also referred to the importance of the Assembly's High Level Targets in ensuring delivery of the Assembly's policy aims for flood and coastal defence and the need to improve the way in which flood defence is generally delivered. Annex 2 summarises progress against the Assembly's High Level Targets while Annex 3 describes actions taken by the Assembly to assist operating authorities in dealing with those and future floods.
5. An area where it has been generally felt that there is scope for improvement lies within the existing funding and administrative arrangements for flood and coastal defence. As a result the Government commissioned a review into this area in 2000. The main focus of this note is on the recently published consultation on the findings of this review.

Review of Flood and Coastal Defence Funding Mechanisms.

6. The Review Steering Group produced its report at the end of last year and a joint consultation paper was launched on 13th February 2002 with consultations to be returned by 17th May 2002. The Review covers England and Wales; it is important to remember that our water catchment boundaries traverse the political border. The exercise seeks views on a range of options for change relating to both funding and institutional arrangements. Copies of the consultation papers are provided in Annex 4. I would welcome initial views on the main issues.

Funding

7. Relevant background to the review was the belief that additional funds would be needed for flood and coast defence activities in the future. The review thus looked at a number of potential sources. The main issues on which views are sought are:
 - i. a development "connection" charge for new properties on a flood plain could be justified to cover costs such as flood forecasting and warning and emergency planning. This could be akin to the connection charged which is now paid for services such as roads, gas etc. While a case can be made for this it would not raise large sums of money;
 - ii. a levy on properties in flood plains could potentially raise significant sums of money and benefit those living on flood plains. Material, political and practical difficulties were identified for such levies;
 - iii. a surface water and drainage charge was considered which would be consistent with the "polluter pays" principle. This was not seen as practicable;
 - iv. a statutory development charge could be considered which would to a large extent model the principles set out in planning guidance whereby developers are required to fund any new or enhanced flood defence necessary to protect the development against flooding or to offset its impact on flood risk. This was not seen as likely to raise significant sources of finance.

- v. the main funding conclusion of the review group was that exchequer funding must remain the main source of finance for flood and coast protection schemes in the foreseeable future..

Administrative arrangements

1. Funding and institutional arrangements are closely linked, and the review also considered the current institutional arrangements and potential changes to those arrangements. The main issues on which views are being sought are:
 - i. reclassification of the most critical "ordinary" watercourses (i.e. those serving significant urban areas at risk from flooding) into "main rivers". This would transfer the responsibilities for such watercourses from local authorities to flood defence committees, supported by the Environment Agency. This could be done by administrative action.
 - ii. removal of the second (local) tier of flood defence committees, which would mean winding up six committees in Wales and vesting their powers in the Welsh Regional Flood Defence Committee, supported by the Environment Agency. Unless the local committees could be persuaded to wind themselves up this would require primary legislation.
 - iii. flood defence committees are funded primarily by the Assembly via a complex arrangement involving Assembly grant and levies from local authorities with subsequent reimbursement of local authorities via the revenue support mechanisms. It may be appropriate to streamline these arrangements by considering direct allocation of Assembly funds to the relevant flood defence committees. This could be achieved by administrative action.
 - iv. making the Wales body responsible for flood defence also responsible for coast protection. This would mean transferring responsibility for coast protection from local authorities in Wales, and would require primary legislation

SUMMARY

1. Since the floods of autumn 2000 much has been done to address the damage caused and to return the flood defence infrastructures to their pre event condition. Improvements to systems are being promoted where it is possible to do so. However there is still much to be done. This consultation exercise provides us with an opportunity to consider from first principles how best to arrange the funding and administrative arrangements for flood and coastal defence delivery in Wales. While it is important to recognise that there are advantages in maintaining a consistent approach across our boundary with England I would welcome your views on this consultation paper.

Sue Essex

Minister for Environment

February 2002

ANNEX 1

FLOODING

PROGRESS ON ONGOING INITIATIVES

1. High Level Targets

High Level Targets provide a framework for ensuring and demonstrating delivery of the Assembly's stated policy aims and objectives for flood and coastal defence. These targets include a requirement to report to the Assembly on a number of matters with the intention of providing greater openness and accountability in the provision of flood and coastal defence services.

In April 2001 High Level Targets were issued to operating authorities superceding interim targets which were published in April 1999. These High Level Targets reflected the elaboration of the Environment Agency's General Supervisory Duties, the work flowing from the Agency's Easter 1998 Action Plan and issues relating to the Autumn 2000 floods.

As principle drainage authority and with general supervisory responsibilities for land drainage matters the Environment Agency(Wales) has a key role in achievement of these targets through advice to operating authorities, monitoring and reporting in addition to achieving its own targets. In Autumn 2001 the EA presented its first annual report in compliance with the HLTs to the Assembly. An Executive Summary of that report is provided in ANNEX 2 .

The period covered by the report was a period of intense activity for the operating authorities as they recovered from the impacts of the autumn 2000 floods and the foot and mouth outbreak. In addition many of the actions are due for completion in July 2002. In this context progress against targets is generally satisfactory and shows steady progress being made in the majority of areas. However, it is accepted that progress on the delivery of flood warning and flood defence improvements must remain a high priority. A more meaningful indication of progress against these High Level Targets will be provided in the next report which will be expected in the coming autumn.

2. Planning Guidance

In the aftermath of recent flooding incidents and in the light of the uncertainties associated with climate change there has emerged a strong need for clear and robust planning policy relating to Development and Flood risk. In response to this need much work has been directed toward policy reviews. These reviews aim to prevent future problems being created by allowing inappropriate development on the flood plain.

In Wales planning policy in relation to flood risk is contained in Planning Policy Wales (PPW) which following a fundamental review is due to be issued in March. This document will contain an overall planning policy stance on development in floodplains. In December 2001, interim planning guidance **on development and flood risk** was issued to all local authorities. This states that local planning authorities should "move towards a more positive avoidance of development in defined areas of flood hazard", and recognise that it will be inappropriate to locate certain types of development in such areas.

PPW will be supplemented by more detailed guidance contained in **Technical Advice Note (Wales) 15 - Development and Flood Risk (1998)** which is also being revised. This guidance will be underpinned by a risk based methodology to assist local planning authorities in addressing flood risk issues and defining areas of flood hazard. It is intended that this guidance be issued for consultation as soon as practicable in 2002.

3. FINANCIAL SUPPORT AND INSTITUTIONAL ARRANGEMENTS

Two major reviews have been undertaken since December 2001. These are as follows:

- The Review of Flood and Coastal Defence Funding Mechanisms
- Environment Agency Financial Management and Policy Review (FMPR)

The main body of this report focuses on the detail of the Funding Review.

4. EMERGENCY RESPONSE/RECOVERY ARRANGEMENTS

During 2001 the final report of the Flood Defence Emergency Response Project (FDER) was presented. This report was prepared to satisfy Government and the public's expectation that emergency response to flooding should be fully integrated and effective. The report highlighted 5 main areas where this improvement would be forthcoming . These areas were as follows;

- Adoption of a common definition of a Major Flooding Incident.
- Standard definitions of roles and responsibilities in Flood Defence Emergency Response for all organisations.
- Adoption of a common multi-organisation emergency planning structure for Flood Risk Management at local level
- Establishment of a National Joint Strategic Flood Group
- An agreed mechanism for developing a Joint Exercise Programme for Major Flooding Events.

The most fundamental recommendation of the report is the adoption of a common multi-organisation emergency planning structures.

During 2001 the UK Government commenced a complete review of emergency planning in England and Wales. It is anticipated that this will result in new Emergency Planning legislation to replace the out of date Civil Defence Act. This work is being taken forward by the Civil Contingencies Secretariat of the Cabinet Office, reporting to the Civil Contingencies Committee. Officials of the Wales Assembly Government are engaged with the Cabinet Office on this work.

As part of the High Level Targets the Environment and is implementing in conjunction with Agency Wales has developed other professional partners a programme of Emergency Exercises at local level. At local level some communities have also been active in establishing liaison/action group to assist in the planning and implementation of emergency response during flood conditions.

5. TECHNICAL APPRAISAL OF FLOOD ALLEVIATION

In the aftermath of the Autumn 2000 floods the President of the Institution of Civil Engineers was requested to set up a commission to undertake a technical review of approaches to river flood defence and make recommendations for flood risk management in the future. That report entitled "Learning to Live with Rivers" was completed in November 2001. Copies of this report are available on the DEFRA website at www.defra.gov.uk/enviro/fcd/consult/default.hmt

The main findings of the report were as follows;

- A more strategic and holistic approach to flood risk management
- Greater consideration of wider options and greater use of natural processes for providing risk reduction
- Greater communication of flood risk to the public
- Increased investment in flood management, proper asset management and improved targeting of investment
- More meaningful performance indicators
- Better understanding of the impact of flooding on society
- An adequate and effective research and development programme
- Adequate skill base within the industry.

A workshop aimed at debating the recommendations and conclusions of the report was held in February 2002. This was well attended by representatives of organisations with an interest or responsibility for flood and coastal defence in England and Wales. The general consensus was that the report was a balanced and well researched document and its conclusions were generally supported. It provides a valuable critique of the current arrangements pertaining to flood defence matters and provides some useful pointers as to possible future direction.

6. APPRAISAL CRITERIA

Following the Autumn 2000 floods the Government requested the Environment Agency to review the current arrangements for appraising flood defence proposals with a view to determining whether current arrangements were appropriate. This report suggested that existing arrangements;

- was over-reliant on economics
- failed to adequately recognise the social impacts of flooding
- could deliver different standards of protection within the same community.

The report also questioned the standard of protection delivered at a time of increasing uncertainty as result of climate change. It called for a simplification of procedures and suggested that a multi-criteria analysis should be adopted. The report also concludes that the current arrangements could lead to long term inefficiencies in the use of taxpayer's funds and suggests that a national debate should take place to debate these issues. In response to and as part of the current consultation paper Government have requested views on the contents of this report.

An Executive Summary of the report is provided as an addendum to this document. Copies of the full document is available on the DEFRA website which is provided below:

www.defra.gov.uk/enviro/fcd/consult/default.hmt

7. RESEARCH AND DEVELOPMENT

Significant progress has been made in this area in recent years following the production by a joint Government/EA Advisory Committee of a report into research and development works for flood and coastal defence. This report was published in June 1999 and recommended that the separate R&D programmes for the two organisations should be restructured and integrated with the following key features;

- Structure based on specific themes;
- Enhanced links between researchers and research users

- Improved management and uptake of R&D.

Since the publication of that report an improved management structure has been put in place and R&D programmes have been integrated and restructured into the following six themes:

- Fluvial Estuarine & Coastal Processes
- Policy Development
- Broad Scale Modelling
- Flood Forecasting & Warning
- Risk Evaluation/Understanding of Uncertainty
- Engineering.

The management structure which is now in place aims to ensure appropriate delivery of outputs from projects within each of the themes. Theme leaders have been appointed and are the focus for discussion between the research community and research users.

The programme of R&D is designed to underpin and inform future approaches to the way flood and coastal defence is delivered within England and Wales and covers both operational and policy development areas. A significant number of R&D projects in the overall programme relate to strategic issues linked to both future policy and technical innovation. A particularly important project is one which looks at how to improve the uptake of new approaches in an industry which is dominated by well tried traditional approaches. The output from this particular project will deal with both systems (eg Web sites for dissemination of R&D documents) and cultural/learning issues (eg the tendency to rely on familiar design techniques.)

Another recommendation of the report was that funding should be increased from its current level of £3.8m per annum to £5.2m per annum. Currently these funds are provided by DEFRA for both England and Wales, and the Environment Agency. Consideration is currently being given to increasing the current levels of funding.

Addendum

ENVIRONMENT AGENCY

REVIEW OF THE

APPRAISAL FRAMEWORK

Executive Summary

In the autumn of 2000 repeated heavy rainfall in October and November caused significant and extensive flooding over large areas of England and Wales. Just under 10,000 homes and businesses were flooded causing damage expected to be in excess of £1 billion. A report entitled "Lessons Learned, Autumn 2000 Floods" was published by the Environment Agency (the Agency) in response to a request by the Minister for Fisheries and the Countryside, Elliot Morley, MP. Within that report a particular question was raised regarding the appraisal process leading to investment decision-making.

This report reviews the existing process for making those investment decisions. It raises concerns about the over-reliance on economics and the degree of recognition of the social impact of flooding on people and communities. It challenges the fact that this process delivers different standards of protection within the same community. It questions the standards of protection delivered by the system at a time of increasing uncertainty over the effects of climate change. It recognises that the £1.7 billion spent on flood defence over 10 years is relatively small in comparison to other public services (for example, spending on Highways is £21 billion over 10 years). Finally it calls for a simplification of procedures to make them proportionate to this level of public investment.

Many of the concerns raised show that over-dependence on economic appraisal leads to a sub-optimal solution, particularly by excluding social matters of high public interest. The pursuit of short-term economic efficiency also prevents consideration of long-term, more sustainable, solutions. This leads to long-term inefficiency in the use of funds from taxpayers and others that, in turn, can create a cycle of reducing standards of protection against a backcloth of increasing flood risk from climate change. This works against the public interest and public expectations. These expectations should be investigated, through a national debate, with particular emphasis on the views of the public and all organisations that either benefit from or have an interest in appropriate flood protection standards for the 21st Century. However, any increase in design standards will lead to fewer, more robust schemes unless funds are increased for this essential public service.

It is difficult to see how Government policy aims and objectives can be achieved by continuing to exclude the wider social and environmental criteria. Appraisal methods should reflect Government sustainability objectives, integrate the key criteria and include a specific fluvial allowance for climate change. Currently this is not the case. It may be difficult to assess these factors in economic terms, but this is not sufficient reason for their exclusion.

The effort and complexity required to implement the current techniques are disproportionate to the problems being solved. Other Government-funded bodies have adopted different approaches to overcome this, which satisfy Treasury guidance. Continuing failure to recognise the key drivers for selecting the right option will exacerbate this.

Multi-criteria analysis (MCA) should be adopted in line with other Government departments as the basis for informing investment decision-making. This will require an MCA guide that is simple and concise, and draws together the best practice elements of DEFRA's FCDPAGs and wider environmental and social concerns. MCA should embrace guiding principles such as local decisions within a nationally defined framework of key criteria, reflect the degree of consensus reached by stakeholders and demonstrate the importance and relevance of the criteria to the chosen solution. This should replace the current decision rule.

The existence of existing multiple and prescriptive detailed guidance introduces complexity and duplication in the appraisal process for flood defence projects. This complexity has created confusion for practitioners and decision-makers and has raised fundamental questions on the fitness for purpose of the current appraisal process and its efficiency and effectiveness.

The current economic assessment techniques include provisions for a distinction founded on social class, which has the effect of developing additional benefits to more affluent areas. In practice the Agency does not make these social adjustments and recommends that DEFRA adopt this national policy for all future economic assessments.

The Agency is now directly responsible to DEFRA and is in a position to participate in policy development to ensure the delivery of coordinated government. Both the Agency and DEFRA must be proactive in ensuring better communication routes and joint decision-making processes, not only in terms of individual projects but also in terms of the development and integration of strategy.

ANNEX 2

ENVIRONMENT AGENCY (WALES)

REPORT ON THE ACHIEVEMENT OF NATIONAL ASSEMBLY FOR WALES

HIGH LEVEL TARGETS FOR FLOOD & COASTAL DEFENCE

EXECUTIVE SUMMARY

Recent research undertaken by Halcrow consultants indicates that in Wales property worth over £7.5billion and agricultural land worth £0.3billion is located within areas potentially at risk from flooding.

The National Assembly for Wales has policy responsibility for flood and coastal defence in Wales. However, delivery is the responsibility of a number of flood and coastal defence 'operating authorities' including the Environment Agency, local authorities, and internal drainage boards. Responsibilities differ according to the type of operating authority.

The Environment Agency (EA) is the relevant 'operating authority' for flood defences on designated 'main' rivers (and certain sea defences) across Wales. The length of 'main' river vulnerable to flooding across EA Wales is estimated to be 5700km. However, Flood Defence Committees are responsible for carrying out all of the functions of the Environment Agency relating to flood defence, with the exception of issuing levies or the making of drainage charges. In EA Wales the Regional Flood Defence Committee has delegated such functions to six Local Flood Defence Committees.

The Government has published a policy aim and three objectives for flood and coastal defence. To ensure a more certain delivery of the aim and objectives by the individual operating authorities the National Assembly for Wales has published a series of high level targets for flood and coastal defence which will operate from April 2001. These put into place arrangements for a more systematic gathering of information about the nature and status of defences. The purpose of this is to assist 'operating authorities' in prioritising activities that can reasonably be required of them in safeguarding human life and property.

This first report covers the performance of EA Wales measured against these high level targets for the period to July 2001 unless otherwise quoted. The detail of the progress made or actions taken for each of the targets is set out in detail in the main report but a brief

summary is provided overleaf.

The conclusion to be drawn from the report is that despite considerable disruption to working arrangements on all of the operating authorities by the winter's flooding incidents, progress has been made in a number of activities. There still remains much to be done, systems for the reporting of progress on a routine basis must be developed and some clarification of the targets will necessarily be required. Many of our defences were tested by the floods and found to be in reasonable condition reflecting the maintenance that has been undertaken over the years. This must not make us complacent as there were many locations which suffered flooding and where we are looking at the opportunities to manage flood risk.

Although a good start has been made, much progress is still required, both with regard to data collection and monitoring and measuring of performance. In order to further this development, the cooperation and goodwill of all the operating authorities is required if the targets are to be satisfactorily met and maintained.

SUMMARY OF POLICY STATEMENTS

Target 1 - Policy statements

- Policy Statements have been produced within the timescale prescribed for the six Local Flood Defence Committees covering EA Wales. In addition the Midlands Regional Flood Defence Committee has also completed a Statement for that part of Wales covering the upper Severn catchment which is administered by EA Midlands Region.
- Whilst no local authority Statements have been received by EA Wales, by the time this report was compiled, there is no reason to believe that these will not be forthcoming by 31 March 2002.
- In the case of the Internal Drainage Boards a number have produced statements and there is also no reason to believe that Statements will not be forthcoming by the due date from the remainder.

Target 2 - Provision of flood warnings

- A prioritised programme of works to extend (introduce warnings to new areas) and improve (in terms of extent and quality) flood warnings is to be produced by EA Wales by the end of the financial year. This programme will be based on a 'Flood Warning Level of Service' approach and applied to all the flood risk areas within EA Wales. It is salutary to note that in North and South East Wales last autumn 1,517 properties that were not included in areas serviced by an Agency flood warning scheme were flooded.
- Implementation of the projects identified in the EA Wales Flood Warning Strategy will in the long term improve the reliability and effectiveness of flood warnings in Wales. However, the dynamics of achieving the desired quantitative improvement in performance by April 2004 is doubtful. The actions arising from the October 2000 floods require the submission by the Agency's National Flood Warning Centre to DEFRA concerning the development of an England and Wales Investment Strategy which is likely to impact upon the targets.
- Notwithstanding the note of caution expressed previously 93% of the flooded properties in areas serviced by a flood warning scheme received a prior warning during the October/November 2000 flood event.
- 19 Severe Flood Warnings were issued across Wales covering a number of separate flood risk areas during the autumn 2000 event. Many of these areas were subsequently flooded. However, it is evident that in a significant number of cases no flooding of property occurred. As part of the continued review of the process the Agency will during the course of the year monitor the number of severe warnings issued, the reasons and consequences and take appropriate action.

Target 3 - Emergency exercise and plans

- A programme of emergency exercises at local level for EA Wales is in place.
- In view of the invaluable experience gained during the October/November 2000 flood event it has been agreed that no exercise at national level is required in the current year.

- During 2000/2001 the main focus of flood emergency exercises related to the change to the coded flood-warning scheme introduced in September 2000. The adoption of seminar type exercises in the pre-planning of this change proved invaluable.
- Formal working arrangements (multi-organisation flood emergency planning fora) and emergency response procedures have been established and developed in collaboration with police, emergency services and local authorities.

Target 4 - Flood and Coastal Defence Database

- The development of the new Flood and Coastal Defence Database is ongoing with delivery of the first phase anticipated in July 2002.
- As an interim measure the existing Flood Defence Management System (FDMS) is being used to hold relevant information pending delivery of the new database.
- Asset identification and population of FDMS is well advanced in relation to those maintained by the Agency.
- The majority of the other operating authorities are assisting in and supplying information on assets that are their responsibility in the appropriate format to the Agency for inclusion in the FDMS.
- In the case of private defences methods of data collection are under consideration by all the operating authorities.

Target 5 - Flood defence inspections and assessment of flood risk

- At-risk inspection programmes are in place for the regular inspection of all Agency maintained defences.
- Discussions are taking place between EA Wales and the other operating authorities with regard to the regular inspection of critical ordinary watercourses and other flood defence assets, which are in private and other ownership.

Target 6 - Coast protection inspections and assessment of coastal erosion risk

- Coast protection authorities through Coastal Defence Groups are to ensure that inspections take place from July 2001.

Target 7 - Reports on inspections and assessments

- The local authority 'operating authorities' are largely assisting and supplying information as requested.
- A rolling programme is to be developed based on the flood risk assessment and the action taken and/or proposed once the collation of asset information is completed.
- The assessment of the risk of coastal erosion is to be undertaken through Coastal Defence Groups.

Target 8 - Expenditure programmes

- EA Wales at the behest of the Flood Defence Committees reviews, investigates the need for and undertakes new flood defence works each year.
- Medium Term Plans are produced each year by EA Wales for all the Local Flood Defence Committee Areas in respect of capital expenditure on 'main river' flood defence proposals. These plans are based upon identified needs which have been shown to be technically and economically robust. These plans are submitted to the National Assembly.

Target 9 - Shoreline Management Plans

- EA Wales makes relevant contributions as required to the development of these plans that are sponsored by the various coastal groups which operate around the coast of Wales.

Target 10 - Catchment Flood Management Plans

- Three pilot studies will be completed by the target date of March 2002 covering the rivers Teifi, Dee and Ely.

Target 11 - Biodiversity

- All the activities of EA Wales are subject to some form of environmental assessment in order to fulfil the Agency's duties under the Environment Act 1995.
- There are no anticipated losses or gains of habitats identified in Biodiversity Action Plans for the flood defence schemes recently promoted where EIAs have been undertaken. These include the Caldicot Levels Sea Defence Improvements and the flood alleviation schemes proposed at Aberfan, and Chepstow.

Target 12 - Water Level Management Plans

- EA Wales is making progress towards the completion of all outstanding Water Level Management Plans the implementation thereof where appropriate. However, in some specific cases progress is being hindered by matters outside the control of EA Wales such as the Ty Cwmn development, which is holding up the Llangennydd Moors WLMP.
- In the case of the completed plans these will be reviewed after a set specified period or earlier by agreement of parties if there are any changed circumstances.

Target 13 - Development in flood risk areas

- Whilst no Unitary Development Plans (UDPs) have been completed during 2000/2001 EA Wales have provided comments on flood risk aspects on six UDPs submitted at varying stages of development by local authorities.
- EA Wales has lodged objections in 118 planning cases on flood risk grounds in 2000/2001.

- There have been 27 planning applications refused in line with EA Wales's advice.
- There have been 44 final planning permissions issued in 2000/2001 contrary to EA Wales's advice on flood risk.

Target 14 - Development in areas at risk from coastal erosion

- Coastal protection authorities through Coastal Defence Groups to report to the National Assembly on development plans that contain coastal erosion statements.
- Coastal protection authorities to report on planning applications where coastal erosion was a material consideration.

**ANNEX
3**

AUTUMN 2000 FLOODS

ASSISTANCE OFFERED BY THE NATIONAL ASSEMBLY FOR WALES

In the immediate aftermath of the October 2000 floods event the Assembly Government;

1. Increased available funds for flood and coastal defence improvement works in Wales raising them from £22m to £25m for a three-year period.
2. Increased grant rates for flood defence works for all operating authorities in Wales by 20%
3. Provided financial assistance to Local Authorities (LAs) via Bellwin Scheme for additional costs (100%) of emergency response activities.
4. Provided additional funds to LAs to implement programme of repair works to return damaged infrastructure to its pre-event condition. Approximately £16.1m offered via the Severe Weather Capital Grant and credit approvals (for Horseshoe Pass only) over 5 years and a further £3.5m being considered. We estimate that £8.0m is likely to be paid in the current year (including £1.5m Horseshoe Pass SCA).
5. Provided additional funds (£650k) to Environment Agency Wales (EA(Wales)) to undertake a programme of emergency works to repair damaged flood defences ahead of winter 2001/02. Programme was completed by September 2001 ahead of winter season.

Following the event and to facilitate the acceleration of flood defence improvements the Assembly;

1. Provided the EA with 100% funding to commence the preparation of three catchment flood management plans in Wales. Planned for substantial completion during 2002.
2. Provided LAs with 100% funding for Strategic Studies aimed at improving understanding and developing more robust flood defence programmes. Majority of LAs have commissioned studies with completion planned for May 2002.
3. Provided EA with 100% funding to progress feasibility studies for specific flooding problems highlighted during the autumn 2000 flood event. Programme of Feasibility Studies planned for substantial completion by April 2002.

February 2002

