Alternative sources of funding for flood risk management

"Local options, local choices"

Updated report on the review of financing options

Report produced by
Brian Madden CPFA for the LGiU
September 2010

Acknowledgement

The **LGiU** is an award winning think-tank. Our mission is to strengthen local democracy to put citizens in control of their own lives, communities and local services. We work with local councils and other public services providers, along with a wider network of public, private and third sector organisations. Through information, innovation and influencing public debate, we help address policy challenges such as demographic, environmental and economic change, improving healthcare and reforming the criminal justice system. We convene the national Children's Services Network and are the host organisation for Local Energy ltd and the Centre for Public Service Partnerships (CPSP). To find out more visit our website www.lgiu.org.uk

The **Local Government Flood Forum (LGFF)** was initially set up by Gloucestershire County Council and the LGiU in response to the summer 2007 floods, with the following aims:

- To provide a coordinated voice on flooding issues for local government
- To discuss the key flooding issues for local government
- To generate new ideas and policy solutions that help local government

To find out more visit www.lgff.info

Brian Madden CPFA, author of the report

Brian spent over 18 years as an external auditor in the District Audit Service (Audit Commission) responsible for the direction of the external audit of major local authorities. On leaving the Audit Commission in 1983 he established a successful career in management and financial consultancy with leading organisations - Grant Thornton, Deloittes, P-E International and the Capita Group.

Brian was at the forefront of the development of the PFI/PPP process in the 1990's through the direction of many PFI projects for major development groups, financial institutions and building contractors. He has extensive experience of raising project finance for multi-million pound development projects in the UK and elsewhere in the world including the USA and China. Brian has assisted the development of business for major property groups, utility companies and financial/management consultancies in the UK. He has also been responsible for the development of major public/private sector partnerships, between government departments, local authorities and private sector organisations. In 2010 Brian was appointed as Strategic Advisor – Public Sector by DMH Stallard LLP, solicitors with offices in London and the South East. To find out more visit www.dmhstallard.com

Contents

Executive summary

1. Introduction

This report follows the completion of the review of *Flood defence costs financing options* published in November 2009 by the Local Government Information Unit (LGiU) and the subsequent discussion of the report at Local Government Flood Forum (LGFF) and Local Government Association's (LGA) National Partners' Group (NPG) meetings. Several options for funding action on flooding have been identified. The questions are: which funding options are appropriate and which ones are not practical for a number of reasons? Which ones will help local authorities to fulfil their statutory obligations and which ones will prove to be a financial and operational burden?

2. The financing approach and the source of funds

In financing capital infrastructure, decisions have to be made about two distinctly different issues. First is the basic financing approach to use and secondly the source of funds to ultimately pay for the capital provision of the infrastructure and use of the facilities, regardless of the financing approach used.

The use of local authority bonds has the capacity to raise billions of pounds to finance a variety of forms of infrastructure. For that reason the method is appropriate for large scale infrastructure projects and/or to provide a fund for a number of smaller projects funded through subsidiary form of lending in particular leasing and short-term loans. The potential amount that could be raised depends on the incentives provided with the approach.

The use of business rates supplements offers a viable approach and the prospect of significant funding –a gross return in the region of £300m per annum - over the next decade.

The use of a general levy across local authority areas offers a viable approach and the prospect of significant funding – a gross return over £200m per annum based on one per cent addition to council tax across the UK - over the next decade.

It is recommended that the LGA's Environment Board is encouraged to promote both the business rates supplements and general levy options. The Department for Environment, Food and Rural Affairs (Defra) and the Environment Agency (EA) are urged to support pilot financing projects with local authorities.

There is a significant annual income potential, measured in tens of millions of pounds, totalling over £100m over the next decade if an appropriate structured approach to the introduction of levies upon beneficiaries can be formulated. Further research is required on the question of how to identify beneficiaries and assess their benefits in order to facilitate the introduction of this approach. It is recommended that Defra and the EA are requested to fund this research and support pilot financing projects with local authorities.

3. New forms of financing

Recently two new options have been identified both of which involve raising capital that will be repaid through future revenue streams. These options are tax increment financing (TIF) and asset backed financing. Plans were announced by Deputy Prime Minister Nick Clegg at the Liberal Democrat conference in September 2010 to relax financial restrictions on local authorities by introducing TIF powers enabling councils to borrow against future gains in business rate income. The measure will work alongside another reform yet to be detailed, expected to enable councils to keep some business rate income from new developments. It is understood that the government hopes that the changes, taken together, will provide councils with both the means and the incentive to encourage large-scale infrastructure projects and commercial redevelopments in their areas.

Both TIF and asset-backed financing methods require significant support from government to be successful. Further research is required on how to introduce these mechanisms. However there again may be interest in establishing some pilot schemes which lend themselves to effective public and private sector partnerships. It is therefore recommended that Defra and the EA are requested to ascertain Treasury views on these options and, if supported, be requested to fund this research and support pilot financing projects with local authorities.

4. Roles of the insurance industry and the water industry

It is important that the LGA monitors carefully the outcome of forthcoming discussions between the ABI and the government on the existing agreement in relation to the future of flood insurance. Thereafter there is considerable scope to conduct further research in association with the ABI on the link and relationship of insurance premiums and increased funding sources from local authorities. The LGA should consider the opportunity for greater liaison with the ABI with a view to exploring options and formulating mutually beneficial and viable funding options.

There is an opportunity for local authorities to work closely with water companies in sourcing additional funding sources through partnerships and joint venture arrangements. It is recommended that the LGA reviews these opportunities in greater detail and request Defra and the EA to support pilot partnership or joint venture financing projects where appropriate.

5. Community and development financing options

Over several years a number of possible developer funding options have been considered with the objective of introducing new arrangements designed to create a simpler, fairer, more transparent and predictable system of standard charges, capable of unlocking additional funding for flood defences and other infrastructure that is required to deliver sustainable local communities. These options included: a statutory development charge payable in respect of specific flood defence costs attributable to individual flood plain developments possibly in the form of a development connection charge, a flood plain levy and surface drainage charges.

In October 2007, the Labour government introduced regulations made under the Planning Act 2008 provided for the community infrastructure levy (CIL). CIL is a voluntary mechanism that allows local authorities in England and Wales to levy a standard charge on most types of new development, to fund the infrastructure needed to support development in their area. It is difficult to estimate how much money will be raised by CIL as it is not known how many local planning authorities (LPAs) will impose the charge, nor the rate at which it will be charged. The Department of Communities and Local Government's (DCLG) impact assessment on CIL produced in February 2010 indicates that it has the potential to raise an estimated additional £700m a year of funding by 2016. However the coalition government stated on 1 July 2010: "The government are currently considering the future of CIL. We will make a public announcement shortly".

In light of the significant potential income to be derived from the successful introduction of CIL it is important that the LGA monitors closely the government's consideration of the future of the proposed levy. Depending upon the outcome the LGA will need to consider the practicalities of introducing the levy and the steps to be taken or examining the implications of any decision to change or cancel its introduction.

There is evidence of a large number of important case studies available outlining good practice in relation to partnerships and other forms of joint working with developer, businesses, water companies and local authorities designed to secure additional funding for flood defence projects. There is clearly a need to capture a range of these examples in order to develop a comprehensive funding guide explaining current and future funding arrangements for flood risk management. It is recommended that the LGA considers the preparation of the guide, which should include the alternative sources of funding approved by the LGA. It is also recommended that Defra and the EA are requested to provide funding and other resources as a contribution to the preparation of the guidance, which should include case study examples on each funding option.

6. Development of a funding strategy using the available options

The government, Defra and the EA are looking for local authorities to adopt a strategic approach to the sourcing and development of funding in support of flood defence works. The government is pointing to the assembly of a funding package derived from some or all of the relevant sources available as the approach to meeting the costs of flood defences. The use of local flood risk management strategies are seen as an opportunity for lead local flood authorities (LLFAs), working closely with partners, to bring together the complete picture on flood risk in the area. This approach suggests that a medium to long term funding structure for a lead authority in relation to securing flood defence works in its area may consist of any or all of: the authority's revenue budget for flood defence works, a specific levy additional to council tax; business rates supplement; CIL revenues, Section 106 receipts, other external contributions, finance derived from partnerships, the use of local authority assets and the extension of the local levy available to Regional Flood Defence Committees (RFDCs).

The resource requirements to be faced by local authorities in developing a fully effective funding structure on the lines outlined above should not be underestimated. The assembly of a complex and wide-ranging package of funding within relatively short timescales requires excellent teamwork among key participants and close coordination of a range of specialist multi-disciplinary professional and support functions within the lead authorities concerned. The establishment of partnerships, joint ventures and effective relationships on a multi-agency, cross-departmental basis demands high level involvement of senior personnel, external advisers and appropriate financial resources to achieve success. The rewards are likely to be significant but obtaining and packaging finance from a number of disparate sources will prove to be a difficult proposition for most local authorities therefore requiring a level of investment commensurate with the outcome and the skills, experience and responsibilities required to achieve success.

7. Conclusion

Britain faces a tough challenge. The UK is in need of a step change in its infrastructure provision. Competing in a 21st century world with a ruthlessly competitive global economy and the challenges of climate change mean that important decisions on the funding of our flood defence infrastructure are required urgently. Innovative local funding is needed for flood prevention and mitigation. The level of funding so far available for infrastructure from the public sector falls far short of what is required - and government finances will be under pressure for the foreseeable future. In consequence there is a need to find ways to: maximise its share of public funding and spend that money more efficiently, find new mechanisms for repaying investment in flood defence infrastructure and attract new sources of funding for investment. The adoption of the recommendations outlined above will represent an important step in meeting the challenges ahead.

1. Introduction

1.1 Overview

This report follows the completion of the review of *flood defence costs financing options* published in November 2009 by the LGiU and subsequent discussion of the report by the LGFF and the LGA's NPG meetings in February, May and July 2010.

This report draws together the findings and conclusions arising from the meetings and additional research carried out since January 2010. It also sets out: a critical review of the options considered, a summary of the key issues arising from the discussions, the impact of current economic conditions in the country and perceived changes in the government's approach to capital and revenue funding by local authorities since the election.

Several options for funding action on flooding have been identified. The questions are: which options are appropriate and which ones are not practical for a number of reasons? Which ones will help local authorities to fulfil their statutory obligations and which ones will prove to be a financial and operational burden? The report is designed to provide answers to these questions.

The report sets out the viability of the options and specifies whether further analysis of any of the options would be useful. It indicates whether or not the funding mechanism should be adopted either on a pilot study basis or as a long term approach to financing and revenue generation by local authorities. An indication is also given of the potential income to be derived from the selected options over 10 years for flood defence and recovery.

The report considers practical ways to develop a funding strategy using the available funding sources and sets out recommendations and conclusions for consideration by the LGA financing options sub-group of the LGA's NPG on how to take these discussions on alternative sources of funding forward.

1.2 Background

Since the preparation of the LGFF *Flood defence costs financing options* report the result of the 2010 general election has brought about one of the most radical shifts in British politics for over half a century. For the first time since the Second World War, two political parties, the Conservatives and the Liberal Democrats, have united to form a coalition government.

The Conservatives and the Liberal Democrats both claim to be the party of the environment, with the former emphasising that "environmental issues must be at the heart of politics" and the latter claiming that all of their policies "have a green thread running through them". Given the significance that both parties afforded environmental issues throughout their election campaigns environmental proposals form a substantial part of the coalition agreement, which indicates that green issues will feature highly on the government's agenda.

Specifically on the government's plans for flood protection the coalition agreement states clearly: "We will take forward the findings of the Pitt Review to improve our flood defences, and prevent unnecessary building in areas of high flood risk". In a debate in Parliament on 13 July 2010 Richard Benyon, Minister responsible for flooding, gave the following assurance "…Defra faces the challenge of identifying the savings that are necessary to the government's plans for dealing with the deficit. However, our absolute priority is to ensure that our flood defences remain as robust as possible".

However the highest priority on the political agenda is to reduce the country's economic deficit. HM Treasury announced on 24 May 2010 that, over the course of the next year, central government departments will be required to make significant financial contributions to a programme to save £6.2bn of public money with Defra facing cuts of £162m. As a result, the exact direction of the government in relation to the future means of funding flood defences is, to a large extent, unclear.

This report draws together the findings and conclusions arising from the meetings and additional research carried out since January 2010. It also sets out: a critical review of the options considered, a summary of the key issues arising from the discussions, the impact of current economic conditions in the country and perceived changes in the government approach to capital and revenue funding by local authorities since the election.

It is proposed that the report is considered at the next meeting of the LGA financing options sub-group with the objective of preparing recommendations for the LGA's NPG meeting.

1.3 Purpose of the report

Under current economic conditions it is important to ascertain the extent to which financial contributions can help to secure the delivery of flood and coastal erosion risk management (FCERM). New funding sources will secure earlier investment and allow existing funding to deliver benefits to communities in a wider range of locations than is currently possible. The drivers are current performance deficiencies and the impact of economic factors.

Several options for funding action on flooding have been identified. The questions are: which options are appropriate and which ones are not practical for a number of reasons? Which ones will help local authorities to fulfil their statutory obligations and which ones will prove to be a financial and operational burden? The report is designed to provide answers to these questions based upon the review of the financing options, the findings of the meetings held to consider the report and additional research on new and the existing options. A detailed brief for the report is set out below.

1.4 Brief for the report

The report is designed to ensure that possible pitfalls in the adoption of selected funding options are identified from the outset. The importance of taking account of the views of a wide range of local authorities, government agencies, relevant industries, professionals, and other stakeholders in formulating a decision-taking process which is centred on the long- term is emphasised. Accordingly a detailed brief was prepared for the report which is designed to:

- Outline the findings arising from the meetings and further research information on the alternative options in relation to both the practicality and the broader potential of each option, both in the immediate and the longer term.
- Specify whether further analysis of any of the options would be useful.
- Indicate whether any particular options are more viable than others and for each option indicate whether or not "the LGFF proposes that the funding mechanism is worth looking at further and that it will realise significant sums over 10 years for flood defence and recovery".
- Consider the role of two new options – TIF and asset-backed financing – in terms of their potential to deliver flood risk management projects in partnership with local authorities.
- Outline consideration of whether the insurance industry and the ABI may be more engaged in financing options and the role of government and local authorities in association with the insurance industry.
- In recognition that there are increasing opportunities for closer working and co-operation with the FWM Act outline consideration of the potential to involve water companies in managing existing flood risk and related financing options.
- Consider the opportunity to secure greater financial contributions from developers and other commercial and community beneficiaries, so that costs are fairly shared and multiple benefits are achieved from new development.
- Outline the development of a funding strategy using the available funding sources.
- Set out recommendations for consideration by the LGA financing options sub-group on how to take these discussions on alternative sources of funding forward potentially to include any or all of the following:

- recommendation to LGA's Environment Board to promote particular option(s);
- request to Treasury to investigate option(s) in more detail; and
- request to Defra and the EA to support a pilot with local authorities.

1.5 Structure of the report

Section 2 sets out the progress of the report in raising awareness of the financing and income generation options. This section outlines the findings arising from key meetings including a summary of the advantages and disadvantages of each option and gives detailed consideration to the alternative options in relation to both the practicality and the broader potential of each option, both in the immediate and the longer term.

Section 3 sets out the viability of the options and specifies whether further analysis of any of the options would be useful. The section indicates whether or not the funding mechanism should be adopted either on a pilot study basis or as a long term approach to financing and revenue generation by local authorities. An indication is given of the potential income to be derived from the selected options over 10 years for flood defence and recovery.

Section 4 considers the new funding options proposed since the completion of the initial report in November 2009. These options include TIF and asset-backed financing in terms of their potential to deliver flood risk management projects in partnership with local authorities.

It is clear that any review of funding options should take account of the existing and potential roles of the insurance and water industries. Section 5 outlines the opportunity for the involvement and engagement in financing options of both the insurance and water industries.

Section 6 considers the opportunity to secure greater financial contributions from developers and other commercial and community beneficiaries, so that costs are fairly shared and multiple benefits achieved from new development.

Section 7 considers the practical ways to develop a funding strategy using the available funding sources.

Section 8 sets out recommendations and conclusions for consideration by the LGA financing options sub-group on how to take these discussions on alternative sources of funding forward.

1.6 Flood and Water Management Act 2010 (FWM Act)

The policy options underpinning the introduction of the FWM Act aim to achieve a series of objectives, as follows:

- Increase the total amount invested in FCERM in order to realise the substantial social, economic and environmental benefits that could be achieved, and in doing so gain a more efficient balance between preventing flooding and bearing the consequences of events when they occur.
- Allow greater local discretion in where and when projects are delivered, as at present communities have only a limited say because projects are almost entirely funded by the taxpayer and therefore need to help achieve national outcome measure targets, as opposed to what would be most desirable locally. This can slow the progress of schemes that would deliver substantial local as well as national benefits.
- Ensure developers bear the full long term cost implications of their activity that results in more people and property placed in areas at risk of flooding. Developers typically pay for any defences needed to protect the new properties, but do not typically pay for their ongoing maintenance or upgrades. New developments in areas already defended do not typically make any contributions at all towards future flood management costs.
- Simplify the funding regime whilst strengthening accountability and value for money by allowing greater regional and local prioritisation of funding, and more transparent delivery of outcomes for the funding provided. At present there are charging powers that lack transparency and mean operating authorities can require money to be paid by parties that might be better spent on other priorities.

Local authorities are aware of the new responsibilities included in the FWM Act although not all understand the implications sufficiently to estimate the resources and funding that will be required to implement the responsibilities. There is concern that lack of funding will be a key issue in the implementation of the FWM Act. Funding for prevention and mitigation is complex as it is needed in advance of a flood event and often without the political momentum provided by a recent disaster. Justifying the need to set aside resources for unknown consequences is difficult in particular in the current economic circumstances in central and local government. Despite many difficulties, prevention and mitigation potentially offer huge benefits and fiscal gains to communities. The problem is how to pay for them. Problems with funding them by traditional governmental methods suggest that innovative local funding is needed for flood prevention and mitigation. The level of funding so far available for infrastructure from the public sector falls far short of what is required -

and government finances will be under pressure for the foreseeable future. In consequence there is a need to find ways to:

- Maximise its share of public funding and spend that money more efficiently;
- Find new mechanisms for repaying investment in flood defence infrastructure; and
- Attract new sources of funding for investment.

2. Review of the funding options

2.1 Overview

The UK is in need of a step change in its infrastructure provision. This review sets out an appraisal of some of the principal financing sources that are appropriate to responding to the challenge.

Key issues are:

- Growing momentum in government and financial services sector towards an infrastructure financing structure based on a market designed to reduce risk for investors.
- Given support from government and continuation of momentum created by influential organisations, practitioners and commentators arrangements needed to underpin the establishment of government and local authority bond schemes would be relatively easy to introduce.
- Bespoke bond schemes would act as an incentive for pension and life funds to play a crucial role in directing savings into infrastructure projects over the foreseeable future. This would provide significant benefits for the UK and investors.
- There is potential to build a leasing product that given an attractive return structure would provide investors with a higher return than currently available with low interest rates. Leasing arrangements based on this approach offer an effective way forward.
- Introduction of business rates supplements and a specific levy on beneficiaries present important ways of increasing local authority revenue required to meet the debt financing costs arising from bonds, loans and/or leasing.
- There is an opportunity to consider of new funding options including TIF and asset-backed financing that require government support to implement successfully.

In financing capital infrastructure, decisions have to be made about two distinctly different issues. These are:

1. The basic financing approach to use; and
2. The source of funds to ultimately pay for the capital provision of the infrastructure and use of the facilities, regardless of the financing approach used.

This section summarises the key advantages of local authority bond financing and principal funding sources required to repay the borrowing.

2.2 Conclusions of the November review of the funding options

The review of *Flood defence costs financing options* published in November 2009 considered the following options:

- Bonds issued by local government;
- Private or public sector loans/leasing;
- Supplements on business rates; and
- A levy on council tax to properties that benefit from flood defence projects and/or the possibility of the introduction of capital and service charges to be levied upon the beneficiaries of flood defence works.

The review concluded that UK is in need of a step change in its infrastructure provision. There appears to be a growing momentum in both government and the financial services sector towards an integrated infrastructure financing structure based on an infrastructure finance market designed to reduce risk for investors. Given the support from government and a continuation of momentum created by influential organisations, practitioners and commentators the administrative arrangements needed to underpin the approach by establishing government and local authority bond schemes would be relatively straightforward to introduce.

The review indicated that bonds have the potential to raise significant capital funds, which can provide a secure, flexible and long term source of funding. However they may require primary legislation for use by local authorities, they would contribute to the budget deficit and they transfer costs to future generations. However this approach may be timely in relation to possible future developments and investment incentives.

Perhaps the most important advantage is that bespoke bond schemes would act as a powerful incentive for pension and life funds to play a crucial role in directing savings into infrastructure projects over the foreseeable future. This would provide significant benefits for the UK and investors. There is also the potential to build an environmentally attractive leasing product that given an attractive return structure would allow the creation of a retail solution providing investors with a higher return than currently available with low interest rates. At this stage leasing arrangements based on this approach offer a most effective way forward in relation to this option.

Local authorities have the necessary powers to provide loans and enter into leasing arrangements to finance flood defence purposes. It is understood that Cambridgeshire County Council have used leasing to finance flood defence works and other infrastructure projects in association with the Cambridgeshire Horizons Partnership.

Local authorities can use business rates supplements for various purposes, including the provision of an income stream to fund borrowing for capital projects, revenue projects and support for partnerships. Local authorities can also raise an additional levy on council tax, particularly to ensure that beneficiaries of flood defences directly contribute to costs. Levies may not be popular or encouraged in straightened financial circumstances, but have gained local support when used to tackle an acknowledged flooding risk. A levy provides a flexible and potentially long term additional funding stream.

The *Flood defence costs financing options* report was presented to the LGFF on 26 November 2009 and copies of the report were circulated to all members. With the support of the LGFF the report was presented to the meeting of the LGA NPG on 3 February 2010. The NPG established the financing options sub-group comprising Daniel Johns (Defra), Elliot Robertson (EA), John Blanksby (University of Sheffield), Richard Bellfield and David Hickman (Lincolnshire County Council), Nick Claxton (East Sussex County Council) Mike Heiser (LGA Finance), Tim Allen (Research and Analysis LGA), Vanessa Goodchild-Bradley (LGA Policy), Andy Johnston (LGiU) and Brian Madden (Financial Consultant for LGiU) to discuss the funding options in detail.

The aim of the group is to examine the development of the possibilities raised by the review on alternative sources of funding, for possible review by the Treasury, including: local authorities' ability to raise capital finance through bond schemes; raise loans supported by insurance; utilise business rates supplements; and use specific levies including additions to council tax. These issues were considered by the sub-group on 19 May 2010 leading to a report back with recommendations as part of a substantive discussion at the LGA NPG meeting on 24 May 2010

2.3 Raising capital and financing revenue repayments

In financing capital infrastructure, decisions have to be made about two distinctly different issues. These are:

1. The basic financing approach to use; and
2. The source of funds to ultimately pay for the capital provision of the infrastructure and use of the facilities, regardless of the financing approach used.

The main options available to local authorities for financing capital infrastructure are:

- Capital funding from central government: infrastructure projects directly paid from the Exchequer in their entirety;
- Capital expenditure financed from revenue: emergency funding for relatively low cost projects used to respond to flood events;

- Loans and leasing arrangements: used for the acquisition of flood defence assets particularly appropriate where privately owned infrastructure (such as buildings) is available for public use; and
- Bond financing: used for large scale projects and typically involves borrowing money to build or acquire capital facilities that generate services over many years.

The main sources of funding available to local authorities to pay for infrastructure include:

- General and selective property taxes such as business rates supplements;
- A levy on properties that benefit from flood defence projects and the possibility of the introduction of capital and service charges to be levied upon the beneficiaries of flood defence works based on an approach similar to that used to recover capital and services costs from leaseholders in the social housing sector introduced as part of the Right to Buy housing legislation; and
- User fees and the sales of other physical assets or income streams from a variety of other alternatives.

The allocation of a project's costs among funding sources is guided by certain principles used in levying taxation and charges in the UK from the public. For example, the beneficiary pays funding principle applies to cases where an identified population or group – as opposed to the population as a whole – benefits from the infrastructure expenditure. In these cases it may be considered appropriate to finance the expenditure, in whole or in part, from charges levied on that group.

Where private developments degrade a natural resource, for example developments on floodplains, and necessitate capital investment to prevent the degradation and restore the resource, it may be considered appropriate to levy fees on those developers or users of the development to defray some of these capital costs. The appraisal of the principal funding options has been undertaken in the context of these principles and by considering the relative advantages and disadvantages of each option in relation to those principles.

2.4 Summary of the advantages and disadvantages of the principal funding options

Option 1: Local authority bonds

Bonds have the potential to raise significant capital funds, which can provide a secure, flexible and long term source of funding. It is important to emphasize that the introduction of local authority bond schemes would clearly require the support of the Treasury as increasing borrowing by this means would contribute to the budget deficit and they transfer costs to future generations. However this approach may be timely in relation to possible future developments and investment incentives.

Perhaps the most important advantage is that bespoke bond schemes would act as a powerful incentive for pension and life funds to play a crucial role in directing savings into infrastructure projects over the foreseeable future. Again this would require both Treasury support and enabling regulations. The Treasury would also need to consider closely the issue of creating national taxation allowances as an incentive to the take up of such schemes notwithstanding the fact that this approach would provide significant benefits for the UK and investors.

The relative advantages and disadvantages of this approach are summarised below.

Table 1: Option 1 – Local authority bonds advantages and disadvantages

OPTION 1: Local authority bonds Advantages	**OPTION 1: local authority bonds Disadvantages**
•**Large** amount of capital funds raised •**Flexible** and may be designed for purpose •Provides a long term financing source •The approach is **embedded in the USA** and many other parts of the world •Given support from Government relatively **straightforward to introduce.**	•**Concerns** about transferring costs of flood defence and disaster recovery **to future generations** who will be burdened by this debt. •Contributes to the **budget deficit** •**Bond rating** will depend on this default risk, which determines cost of borrowing funds.

There are significant benefits of bond schemes for flood risk financing. The pension industry might also benefit from a secure investment fund. Industry experts have called for more to be done to encourage pension funds to back large-scale national infrastructure projects. In particular a new financial instrument for pension funds may be invented to pay for transport, communications, and water including flood defence and energy projects.

Conclusion

Before considering the viability of bond schemes it is clear that:

- The advantages of the approach significantly outweigh the disadvantages.
- This is potentially a most effective and flexible source of funding.

- Bond schemes have potential to finance capital expenditure requirements in the future supported by a range of national and local income streams.

Option 2: Loans based on reduced insurance premiums

The government and the ABI agreed a revised Statement of Principles in 2008. This states that owners of properties in areas at significant flood risk built after January 2009 can no longer assume they will receive cover under their domestic insurance policies, necessitating more costly stand-alone insurance cover. It is considered that this will encourage developers and property owners to better manage the risk themselves, and for developers to consider FCERM costs as they plan and present applications for new building projects.

In order to secure the benefits outlined by the EA and to introduce loans or leasing arrangements administered by local authorities or private sector organisations will require close cooperation and agreement with insurers and the ABI. Government support and, possibly, new legislation, would also be important to ensure that any arrangements introduced are not in conflict with the national strategy.

Arrangements designed to provide loans on the basis of reduced insurance premiums would almost certainly require compulsory buildings insurance for all property owners in a designated flood risk area probably on the lines of the National Flood Insurance Programme (NFIP) in the USA. The NFIP was created in 1968 to enable property owners in participating communities to purchase insurance protection from the government against losses from flooding. This insurance is designed to provide an insurance alternative to disaster assistance to meet the escalating costs of repairing damage to buildings and their contents caused by floods.

Any review of funding options should take account of the existing and potential roles of the insurance industry. There are opportunities for the involvement and engagement in financing options of the insurance industry.

The relative advantages and disadvantages of loans and leasing arrangements are summarised below.

Table 2: Loans based on reduced insurance premiums advantages and disadvantages

Option 2: Loans based on reduced insurance premiums Advantages	Option 2: Loans based on reduced insurance premiums Disadvantages
• Significant practical problems to resolve before a system centred on savings in insurance premiums may be implemented. Local authorities have powers enabling them to make loans or enter into or provide leasing arrangements provided they have income streams sufficient to finance the revenue or capital outlay. • The purchase of flood protection equipment is not always necessary or appropriate and many local authorities have used leasing to finance flood protection measures e.g. flood barriers.	• Practical difficulties with this option make it less attractive. Difficulties concern whether there is a need to consider the introduction of compulsory flood insurance and to reach agreement with the ABI, Insurance companies and government on arrangements to ensure the practical introduction of the system. • Uncertainty on amount of finance to be generated, but the introduction of a surcharge on insurance premiums has potential to raise a significant amount.

Table 3: Leasing arrangements advantages and disadvantages

Option 2: Leasing arrangements Advantages	Option 2: Leasing arrangements Disadvantages
• Technology is an operating cost supported by the business operation; • Cost effective solution to acquire the latest flood protection technology; • Lower administration cost due to common payment dates each month, quarter or year; • Provides greater flexibility at the end of the contract term and removes any risks of having obsolete technology; Lower cost of entry to new technology; and • Preserves capital expenditure financing options for other long term, high cost projects.	• The principal disadvantage of leasing is the lack of availability of leasing finance from banking sources. For many years the leasing industry has provided funding for local authorities. • Problems of the UK banking industry, unlikely that UK Banks alone could provide such funds in short or medium term. But Hedge Funds and other Investment Institutions have substantial monies available and are considering a move into markets now vacated by banks.

Local authorities have the necessary powers to provide loans and/or enter into leasing arrangements to finance flood defence purposes. It is understood that Cambridgeshire County Council have used leasing to finance flood defence works and other infrastructure projects in association with private sector partners and the establishment of a regional infrastructure fund. There is a potential to build an environmentally attractive leasing product that given an attractive return structure would allow the creation of a retail solution providing investors with a higher return than currently available with low interest rates. At this stage leasing arrangements based on this approach seem to offer an effective way forward in relation to this option.

Option 3: Business rates supplements

The relative advantages and disadvantages of this approach are summarised below.

Table 4: Business rates supplements advantages and disadvantages

Option 3: Business rates supplements Advantages	**Option 3: Business rates supplements Disadvantages**
• This is potentially an effective and flexible source of funding for flood prevention and mitigation. • The main advantage of the supplement on business rates is that it is an add-on to an existing tax thereby making it relatively easy to collect and at relatively lower administration cost. • The supplement also provides a large and stable revenue income stream. • It may provide income stream in support of borrowing needed for high value capital projects; a source for creation of funds to deal with a future emergency; funding of lower cost prevention schemes from revenue; and seed finance for public and private sector partnerships to provide long term solutions. • It is also arguably fair that beneficiaries pay a proportion of their gain from flood prevention, mitigation and recovery expenditure.	• Important disadvantages are the time taken to implement a supplement to business rates and the wide range of competing infrastructure projects. The implementation of a business rates supplement involves consultation based on the preparation of a detailed business case. This is followed by a ballot of all the organisations concerned. This is a time consuming process, which does not lend itself to an emergency caused by flooding . • It is difficult to present an effective business case for flood prevention as opposed to more atttractive infrastructure, regeneration and development schemes. • Sectors of the economy which have large properties but relatively low turnover, such as retail, may be disproportionately affected by changes in business rates, as rates constitute a much higher percentage of their costs. • The business rates supplements approach is a tax based on the rateable value of a property and could act as a disincentive to business property growth. The Government has recognised this and has enabled levying authorities to set a taper and/or increase the threshold helping to mitigate this potential impact. • Base of the tax may not increase as property valuations are only occasionally updated. In order to maintain revenues in real terms the rates need to be increased. • Property taxes are unpopular and may act as a disincentive to economic activity leading businesses to close or relocate. • Yield from the tax will be higher in wealthy areas as opposed to poorer communities some of which are likely to be affected by flooding problems. • In effect flood defence may not be regarded as a priority even in some areas affected by flooding in the past.

Conclusion

Notwithstanding the general disadvantages of business rates supplements and the specific issues relating to business rates supplements, the advantages of this funding method outweigh these considerations.

Option 4: A levy additional to council tax

The relative advantages and disadvantages of this approach are summarised below.

Table 5: A levy additional to council tax

Option 4: A levy additional to council tax Advantages	Option 4: A levy additional to council tax Disadvantages
• The principal advantage of a levy additional to council tax on direct beneficiaries of flood defence works is that is that it creates a new flood defence funding system. • Local authorities have sufficient legal powers to implement a simple levy throughout their areas. • It creates local responsiveness by making those who benefit from defending against floods pay the costs incurred. • This method if allied to some form of betterment related charge would help to capture substantial benefits from defence measures. • This approach could be used as a local funding stream for compensation in that the levy could be devised to recover a proportion of the actual costs incurred. • The approach appears equitable in principle and complies with the Pitt recommendations and is supported by the government's response to those recommendations. • The levy is an add-on to an existing tax thereby making it relatively easy to collect however the start-up administration costs will be high. • The implementation of a levy system based on the social housing approach across the country has the potential to provide a substantial and stable revenue income stream to become the basis of significant funding in the long term.	• High costs involved in implementing an effective levy system due to the possible need to create a regulatory process to govern the charging mechanism. • Problems concerning the calculation of the benefits derived from flood defence and in turn the calculation of the levy itself. • Difficulties associated with the assessment of betterment and several attempts at trying to capture betterment into public purse have been made without success. • Difficulty in identifying who should pay a levy due to the nature of flood defence works. • If economic activity increases in areas outside the flood plain because of the flood protection, a land and property tax in the flood plain would miss these beneficiaries. • It may also miss some other beneficiaries in the flood plain. Therefore a levy applied to those who live within a flood plain requires the area to be accurately defined. Current flood plain maps are indicative only and much work would need to be done to improve their accuracy. This matter is likely to become a matter of dispute and legal argument. • There is some legal uncertainty about the ability of local authorities to levy a charge for flood defence purposes but if a scheme along the lines of social housing service charges was introduced it would almost certainly benefit from or require primary legislation. • It is arguable whether the implementation of a levy system might lead to a return to ad hoc funding arrangements for coastal defence and that flood defence is a national issue with current funding systems including a measure of local payment.

Conclusion

Notwithstanding the undoubted difficulties associated with establishing an effective levy system the advantages of this funding method significantly outweigh these considerations. This is potentially a most effective and flexible source of significant, continuous long term funding for flood prevention and mitigation. As with a supplement on business rates it may provide the income stream in support of borrowing needed for high value capital projects; a source for the creation of a fund to deal with a future emergency; the funding of lower cost prevention schemes from revenue; and the seed finance for public and private sector partnerships to provide long term solutions.

2.5 LGFF view on the key funding options

The LGFF meeting held on 29 July 2010 was devoted to a large extent to a debate on the respective funding options outlined in the November 2009 report. LGFF members convened in an afternoon workshop with five separate groups considering the five options in detailed. The purpose of the workshop was to examine the funding options, clarify the strengths and weaknesses of each and suggest when it would be appropriate to use them. In particular each group was asked to specifically consider the following:

- Are there any other major advantages and disadvantages and important obstacles to implementation of each of the options?
- Is there anything attendees would not want to pursue?
- What recommendations are the group prepared to make in relation to the option(s) in order to progress implementation?

The workshop was facilitated by Brian Madden and the groups were chaired by Councillor Derek Antrobus from Salford City Council, Mark Parker from Gloucestershire County Council, Councillor Tracy Chapman from Essex County Council, Alistair Moseley from WSP, and Tim Farr from Severn Trent RFDC. There was a report back to the plenary before the close of the event.

There was an extensive debate in each group and the report back sessions identified the key issues arising as summarised below:

2.5.1 Local authority bonds

- Capital funding is not the main problem and the principal concern relates to a lack of revenue funding;
- More expensive than Public Works Loan Board (PWLB) loans;
- Most effective for cross boundary, large scale projects where large capital sums are required;
- Useful for long term funding plan; and

- More suited for regional funding rather than individual local authorities.

2.5.2 Loans based on reduced insurance premiums

- Not a favoured approach in general;
- Time taken too long to implement;
- Need to await the outcome of government and ABI insurance summit;
- Not appropriate method for many properties; and
- There is a stigma attached to household flood resilience and insurance.

2.5.3 Business rates supplements

- Needs to be implemented across the country to avoid possibility of economic development blight;
- Need to be a consistent rate;
- Suggest apply in part to water rate; and
- Problems caused by differential rate levies.

2.5.4 A levy additional to council tax

- Potential problems envisaged over fairness of additional levies;
- Need for public consultation and understanding of the need for the levy
- Need for consistency;
- Suggest that the levy is for specific works rather than general charge;
- Potential to become highly politicised; and
- Useful as link to other forms of investment.

2.5.5 TIF and asset-backed financing

- Enables local authorities to establish their own priorities;
- Suitable mainly for large scale projects;
- There may be boundary problems and there is a need to define the beneficiaries clearly;
- Need to apply to existing as well as developing areas and properties;
- Further information is needed to consider the options effectively; and
- Some authorities do not have any assets to mortgage or contribute.

2.5.6 General comments

LGFF members considered that all the principal advantages and disadvantages of each option have been outlined in the report. There were no other major advantages and disadvantages and important obstacles to implementation of each of the options put forward. The option to introduce a system of loans based on reduced insurance premiums was the least popular option identified by the attendees and, in general, was not considered to be one to pursue at this stage. It is important to add that attendees were concerned about the problems associated with each of the options and aware of difficulties in implementation.

Attendees considered that there is a need to relate catchment areas to local authority areas and secure agreement with all the authorities concerned in developing funding strategies. Discussion also centred on the possibility of water companies raising charges and transferring the income collected to local authorities. This approach is considered in Section 5 of this report. Finally, there was unanimous agreement on the need for a funding guide explaining current and future funding arrangements for flood risk management together with the need to submit requests to Defra and the EA to support the preparation of the guide and to pilot financing projects with local authorities.

3. Viability of the options

3.1 Overview

The use of local authority bonds has the capacity to raise billions of pounds for a variety of forms of infrastructure. For that reason the method is appropriate for large scale infrastructure projects or to provide a fund for a number of smaller projects funded through subsidiary form of lending in particular leasing and short term loans. The potential amount that could be raised depends on the incentives provided with the approach. Approximately £50bn a year is placed in pensions in the UK. Designing a bond that would meet the long term needs of the pension market is potentially an attractive way of creating substantial funding for flood defence works. Given government support local authority bonds are a practical way forward being relatively straightforward to implement, the benefits for the flood affected areas of the UK would be significant and the UK pension industry would benefit from a secure investment fund.

The use of business rates supplements offer a viable approach and the prospect of significant funding – a gross return in the region of £300m per annum - over the next decade and therefore it is recommended that the LGA's Environment Board is encouraged to promote the option. It is also recommended that Defra and the EA are urged to support pilot financing projects with local authorities.

The use of a general Levy across local authority areas offers a viable approach and the prospect of significant funding – a gross return over £200m per annum based on a one per cent addition to council tax across the UK - over the next decade and therefore it is recommended that the LGA's Environment Board is encouraged to promote the option. It is also recommended that Defra and the EA are urged to support pilot financing projects with local authorities.

It is clear that there is significant annual income potential measured in tens of millions of pounds totalling over £100m over the next decade if an appropriate structured approach to the introduction of levies upon beneficiaries can be formulated. Further research is required on the question of how to identify beneficiaries and assess their benefits in order to facilitate the introduction of this approach. It is therefore recommended that Defra and the EA are requested to fund this research and thereafter support pilot financing projects with local authorities.

3.2 Local authority bonds

The use of local authority bonds is a relatively straightforward solution, practical and of potential value to all participants and broader society. The practical application of local authority bonds would be facilitated by the introduction of an overseeing corporate body. This could be a company with a relatively limited share capital, all of which should be held on trust by the government for the benefit of the communities of the UK recognised as being at risk from flooding, whether from river water or inundation from the sea. Trustees would include appropriately experienced professionals and representatives from communities affected as well. The company may then oversee the issue bonds to raise the capital sums required to undertake the necessary flood protection work in the areas at risk. It could include improved flood defence and drainage mechanisms including improved infrastructure to prevent risk of failure of essential services.

Bonds could be designed on a basis equivalent to a US local authority bond. These have their below market average rate of interest paid tax free. The interest charges are reduced reducing the sum required to be raised by local taxation but the return is tax free in the hands of the recipient. If, say, the return was 75 per cent of normal market rate this would still represent a beneficial return for high rate taxpayers and would be likely to create a pool of investors looking for a long term safe and secure opportunity for their money. Investors would know exactly what their money was being used for and would see a direct result both now and in the long term in addition to any financial return they secure. Bonds have been used develop parks, natural areas, and open space, all of which can act to mitigate the losses in a disaster, depending on how they interact with the forces involved.

The repayment of the bonds could therefore be achieved in a number of ways:

- Specific income raising sources promoted by local authorities – business rates supplements, levies additional to council tax
- Income from property development – CIL
- Premiums on household insurance in flood affected areas in negotiation with insurance companies that would benefit from the arrangement and should prove to be viable for them
- By a subsidy on national taxation – government could address the tax status of asset based investments and make interest on the bonds tax free for retail and pension fund investors.

Infrastructure projects represent a good case for a priority lowering of tax on investments. Their wider public benefit is not reflected in prices and merits a positive discrimination in their favour. As a result it is possible to make a good case for treating interest on the bonds tax free. In addition pension and life funds may be encouraged to play a greater role in channelling savings into infrastructure projects as they are the principal vehicles for savings in the UK. This matter should be investigated in more detail by the Treasury.

3.2.1 Viability of the approach

This method of borrowing has the capacity to raise billions of pounds for a variety of forms of infrastructure. For that reason the method is appropriate for large scale infrastructure projects and/or to provide a fund for a number of smaller projects funded through subsidiary form of lending in particular leasing and short-term loans. The potential amount that could be raised depends on the incentives provided with the approach. Approximately £50bn a year is placed in pensions in the UK. Designing a bond that would meet the long term needs of the pension market is potentially an attractive way of creating substantial funding for flood defence works.

There is a significant difference between the costs of capital under different regulatory regimes and these costs determine the viability of borrowing through bonds. The viability of this approach is related closely to the interest rate charges attached to bond schemes. Traditionally the interest rates are much higher than, say, PWLB rates available to local authorities. Private finance initiative (PFI) projects have turned out to have relatively high costs of capital, whereas price-capped, asset based bonds could have lower costs of capital. A one per cent change in the cost of capital on the total programme of £500bn is worth £5bn per annum. Therefore a great deal depends upon whether the regulatory system and the role of government are designed to hold down the cost of capital. Again this is a matter for further consideration by the Treasury as:

- The cost of bonds may become closer to that of government borrowing and might become lower risk because investors have physical assets to fall back on.
- This is a practical way forward being relatively straightforward to implement.
- The benefits for the flood affected areas of the UK would be significant.
- The UK pension industry would benefit from a secure investment fund.

3.3 Loans based on reduced insurance premiums

For the reasons outlined in Section 2 above it does not seem appropriate to attempt introduce a mechanism designed to raise income to provide loans based on reduced insurance premiums

3.4 Business rates supplements

The Business Rate Supplements Act 2009 enables levying authorities - county councils, unitary district councils and in London, the Greater London Authority - to levy a supplement on the business rates to support additional projects aimed at economic development of the area. There are some important requirements for local authorities in introducing business rates supplement:

- Revenue from supplements will only be available for spending on economic development, including infrastructure and flood defence works, in addition to existing plans. Proposals will be subject to detailed statutory consultation.
- A national upper limit of two pence in the pound of rateable value will be set on the level on supplements that can be levied.
- To protect smaller businesses from disproportionate burdens, properties liable for business rates with a rateable value of £50,000 or less will be exempted from paying supplements.
- Where the supplement will support more than a third of the total cost of the project there will additionally be a full double-lock vote of businesses affected.
- Revenues from supplements will be locally raised and retained, with local decision making on the duration of any supplement and the specific projects it should be spent on.
- The government intends that only the highest tier authority in any areas should be entitled to levy supplements.

Local authorities will be able to cooperate to fund joint projects, within the existing statutory framework. Shire counties will be required to consult their districts on any new supplement proposals. The government acknowledged that "…. in order to invest in infrastructure, local authorities are likely to seek to use their powers for prudential borrowing under the 2003 Local Government Act. Such borrowing increases the stock of public debt, which is subject to strict limits as a result of the government's fiscal rules. The policy framework for a business rates supplement needs to provide the fiscal rules with adequate protection".

Therefore, in principle, the business rates supplement is an attractive source of revenue to pay back infrastructure investment. The Act followed the *Business Rate Supplements: a White Paper*, the Review *of Sub-national Economic Development and Regeneration* and the Lyons inquiry into local government, all of which noted that decisions on funding infrastructure and other projects to support economic development are among those that should be made at the local or sub-regional level. However, they also noted that "…levers to achieve this were currently lacking, and that Local Authorities currently feel constrained by the lack of flexibilities and powers available to them".

3.4.1 Potential income

The Table below sets out the total of new investment that could, in theory, be provided by a business rates supplement of two pence as shown in the White

Paper. The areas selected are intended as an illustrative cross-section by area size, type and geography.

Table 6: Illustrative revenues from business rates supplements in different areas

Greater London 177.9m per annum	Over 5 years a total of £889.5m Over 10 years a total of £1.779bn
Greater Manchester (10 authorities) 28.9m pa	Over 5 years a total of £144.5.5m Over 10 years a total of £289m
West Midlands (7 authorities) 27.5m pa	Over 5 years a total of £137.5m Over 10 years a total of £275m
West Yorkshire (5 authorities) 20.1m pa	Over 5 years a total of £100.5m Over 10 years a total of £201m
Lancashire 7.8m pa	Over 5 years a total of £39m Over 10 years a total of £78m
Essex 12.1m pa	Over 5 years a total of £60.5m Over 10 years a total of £121m
Hampshire 12.3m pa	Over 5 years a total of £61.5m Over 10 years a total of £123m
City of Manchester 9.0m pa	Over 5 years a total of £45m Over 10 years a total of £90m
Sheffield 5.9m pa	Over 5 years a total of £29.5m Over 10 years a total of £59m
Bristol 4.8m pa	Over 5 years a total of £24m Over 10 years a total of £48m
Newcastle 4.0m pa	Over 5 years a total of £20m Over 10 years a total of £40m
Nottingham 4.2m pa	Over 5 years a total of £21m Over 10 years a total of £42m
Milton Keynes 4.8m pa	Over 5 years a total of £24m Over 10 years a total of £48m

Source: White Paper – rateable value data from Valuation Office Agency and DCLG data.

3.4.2 Viability of the approach

As the Table shows, local areas could use the revenue from a business rates supplement to borrow significant sums of money and has the potential to provide the funding for major flood defence projects. This particularly applies in urban areas, or where local authorities chose to collaborate, and the additional resources could support one or two key capital projects. Clearly the amount of the funding directed towards flood defence works would be determined by the different investment priorities and local economic needs of each authority. Moreover the revenue generated from a business rates supplement need not be used to support borrowing; the resources could be used for revenue projects and/or funding leasing schemes for small and medium flood defence schemes.

It is not possible to predict the total costs of implementing business rates supplement as it will depend on its take up. The impact assessment prepared in relation to the Bill indicated that if business rates supplements were levied by a number of authorities, the revenue raised nationally could be £319.3m. The net present value over 10 years would therefore be £2,748m. The assessment suggests that there will be a greater tax burden on ratepayers in those areas where a business rates supplement is introduced. However, this should be offset by the improvements to local economies. Business rates are a much more dependable income stream than developer contributions. Business rates supplement provides a new tool to enable communities to pool resources to invest in economic development, both across a local authority area or as part of a multi-area supplement. In consequence the use of business rates supplement offers a viable approach and the prospect of significant funding over the next decade.

Not every area will raise a business rates supplement and it will only be justified to fund specific projects. So far, there has been relatively little enthusiasm for the use of business rates supplement because of fears that it would be politically unpopular and that it would be used to fund projects that some might consider ought to be funded by central government. It is also clear many businesses are under pressure to reduce costs and with a deepening recession local businesses are likely to consider that this is not the right time to be increasing business taxation. Notwithstanding the current economic difficulties surveys of businesses by representative bodies including chambers of commerce indicate that proposals concerning infrastructure projects, in particular flood defence schemes, that business believes is necessary are more likely to receive the necessary support. Businesses need to be convinced that the benefits of investments arising from a supplement outweigh its costs. There also needs to be effective liaison with business on the initiative with opportunities for local businesses to bid for contracts together with effective consultation on the project prospectus and the business ballot.

3.5 A levy additional to council tax

There are a number of powers available to local authorities enabling the raising of specific levies and other charges. Increasingly commentators have pointed to the Local Government Act 2000 as being the most recent addition to the list. In response to the White Paper, *Modern Local Government: in touch with the people* (HMSO, 1998), the Local Government Act 2000 has been the cornerstone of local government reform, providing for better community leadership and stewardship as well as improved public local services and quality of life of local communities. At the heart of the new legislation, the Act provides local government with the power to promote or improve the environmental, social and economic well-being of their area. This discretionary power has been described as a “power of first resort”, an enabling power, which frees local authorities from most of the constraints of the ultra vires doctrine. This means that they are better able to provide community leadership to address cross-cutting issues which could include coastal and flood risk management.

The Act states that the well-being power may be used for the benefit of the community in relation to:

- the whole or any part of a local authority’s area; and
- all or any persons resident or present in a local authority’s area

As such, this Act could play a significant role in identifying ways of funding flood defences if this is seen to be beneficial for the well-being of the local community. For example a decision to raise funds by way of a levy in the area would seem to fit the definition of well-being. In this context that the Act includes a power for a local authority to:

- Incur unlimited expenditure;
- Give financial assistance to any person;
- Enter into arrangements or agreements;
- Co-operate, facilitate or co-ordinate any activities;
- Exercise functions on behalf of any person; and
- Provide staff, goods, services or accommodation to any person.

However the definition of well-being has proved to be problematic with many authorities now developing quality of life indicators to try to understand and gain a measure of economic, social and environmental well-being in their areas. The power is not a carte blanche to do anything and its implementation has to be utilised in the context of best value and associated performance plans so authorities are still held to account for the efficiency and effectiveness of their services and associated actions. There are further restrictions associated with the power. The legislation does not allow local authorities to do anything prohibited or restricted by other legislation and councils are prohibited from raising money to offset the cost of providing services under the power. It should be noted that no additional funding is available to support local authority development of this activity.

Broadly there are two ways of raising money through the use of a levy additional to council tax. Firstly, an authority may simply increase their council tax by an agreed amount and collect the levy along with the remaining tax. This approach was adopted by Gloucestershire County Council in 2008 and 2009 as a specific levy dedicated to the payment of costs for flood alleviation. Secondly, the levy may be charged selectively upon beneficiaries of expenditure incurred on flood defence works. This charge may take the form of a capital charge contribution to capital costs incurred by the authority or a revenue charge as a contribution to repairs and maintenance costs incurred by the authority on the upkeep of flood defences. This approach being similar to the way charges are raised upon leaseholders in the social housing sector. The potential revenue capable of being raised varies depending upon the approach adopted. The options are considered below.

3.5.1 Income potential and viability of the approach

When Gloucestershire County Council increased their council tax they required an increase of 1.1 per cent which was charged uniformly across the county. That additional charge resulted in additional income of £2.3m and this represents a ready measure of the significant amounts that may be raised if other major authorities applied the same approach. Local authorities in England collected £20.9bn in council taxes by the end of March 2009 out of a total of £21.6bn collectable. This gave a national average in year collection rate for council tax in England of 97 per cent in 2008/09, a decrease of 0.1 per cent over 2007-08.

Table 7: Illustrative revenues from a general levy of one per cent added to council in different areas: the total net collectable debit for council tax in England for 2008/9 was £21,557,976m

London Metropolitan Districts £3,231,468m	One per cent of total is £32,314,680 Over 5 years a total of £161,573,400
Metropolitan Districts £3,644,166m	One per cent of total is £36,441,660 Over 5 years a total of £182,208,300
Shire Districts/Counties £11,373,145m	One per cent of total is £113,731,450 Over 5 years a total of £168,657,250
Unitary Authorities £3,309,187m	One per cent of total is £33,091,870 Over 5 years a total of £165,459,350

Manchester £119,076m Sheffield £179,399m	Manchester: one per cent of total is £1,190,760 Sheffield: one per cent 1% of total is £1,793,990
Leeds £248,452m Newcastle £85,219m	Leeds: one per cent of total is £2,484,520 Newcastle: one per cent of total is £852,190

Once again as with business rates supplement a one per cent levy across individual local authority areas would raise significant sums of money and has the potential to provide the funding for major flood defence projects. Similarly the revenue generated from a levy need not be used to support borrowing; the resources could be used for revenue projects and/or funding leasing schemes for small and medium flood defence schemes.

There would be a small addition to collection costs and there would be additional costs arising from the need to consult council taxpayers and promote the case for the need for an increase. The Gloucestershire County Council levy provides a most useful case study. The levy provides a means of raising significant income either across a local authority area or as part of a multi area supplement. In consequence the use of this form of levy also offers a viable approach and the prospect of significant funding over the next decade.

3.5.2 Capital and service charges on beneficiaries

Charges levied upon beneficiaries in the form of a capital charge contribution to capital costs incurred by the authority or a revenue charge as a contribution to repairs and maintenance costs incurred by the authority on the upkeep of flood defences also have the potential crate significant and long term income over the next decade. Similar capital and revenue charges raised upon leaseholders in the social housing sector provide significant levels of income for social housing organisations. Since February 2006, DCLG has been reviewing the issues raised by high major works charges in the social housing sector. A survey conducted for DCLG by the Association of London Government showed that up to May 2006, of the 108,000 council leaseholders in 23 London Boroughs, around 5,200 had received major works bills of £10,000 or more. Of those, around 1,300 bills exceeded £20,000 thereby contributing over £40m to the capital costs of the improvement works undertaken by the local authorities. Some 300 of these bills were capped at £10,000 under mandatory directions. A summary of the accounts of housing associations for 2008/9 show that over £700m was collected from service charges a high proportion of which are from leaseholders.

However, it is important to acknowledge that the position is complex and DCLG is looking at ways of making the present system more effective. DCLG is considering ways of encouraging landlords to use the powers already available to them more flexibly to help leaseholders to pay these charges. Measures are likely to include: having regard to individual circumstances; working with other agencies and with lenders and finding ways of increasing access to the equity loan and equity release products available in the market.

Procedures designed on the lines of the social housing sector would require the establishment of administration and collection systems including the management of legal agreements for both capital and service charge levies. Key features of the procedures include: a requirement to give charge payers a wide range of information; separate charging and collection systems; provide an estimate of the service charges likely to be payable over five years; provides that this estimate may not be exceeded during the five year period, except by the addition of a specified allowance for inflation and mechanisms allowing charge payers to challenge bills.

Clearly there would be significant costs involved in establishing detailed procedures and systems on these lines. There would also be a need to carry out a detailed review to identify and consult with the beneficiaries to be included in the scheme. The benefits of flood defence and control projects are the real resources saved, and the increased production resulting from a reduction in flood damages. Some of these benefits will accrue to land and other property owners through increased productivity and an increase in land and property values. Consequently a charge designed to recover the capital and revenue costs incurred in helping to make this happen is a sound way of capturing some of these gains if the recovery of project costs is an important objective. If charges are levied on this basis then payments will be directly related to benefits received, which are dependent on the degree of flood protection provided.

A significant problem relates to the identification of the beneficiaries upon whom the charges would be levied. Given that flood control is provided for a specific area, it becomes available to everyone in that area. Provision for one person cannot be accomplished while excluding someone else in the area. A fee for service on a voluntary basis is, therefore, unlikely to be capable of implementation. In addition, if economic activity increases in areas outside the flood plain because of the flood protection, a charging system related only to the area of the flood plain would miss these beneficiaries. It seems likely that if investment in flood control is to achieve its intended goal of reduced flood damages, other policy tools, such as zoning to restrict economic activity in the flood plain, will be needed in order to support the introduction of an equitable charging method. This is especially important if beneficiaries of flood protection are not asked to share the costs, in full, of benefits received.

In practice, beneficiaries have not been required to share fully in the costs of flood protection, due to the difficulties involved in collection. Greater efforts at restricting economic activity in the flood plain that usually accompanies flood control projects would move in the direction of improving both economic efficiency and equity. In summary, the general principle of the beneficiary pays is compatible with both the efficiency and equity goals of FCERM.

However, it is more practical to collect on the principle of "benefits received" for those goods approximating "rival goods". In economic terms there are difficulties identifying beneficiaries of flood defences, which resemble "non-rival goods" – goods that may be consumed by one consumer without preventing simultaneous consumption by others – due to the difficulty in assessing the benefits received. As a result that there are good theoretical and common sense grounds for financing them from other sources or with indirect taxes. In consequence it is important to emphasise the complexity and cost of establishing this method of charging. This approach would need to be applied to a large number of beneficiaries to make it viable, but it is clear that there is significant annual income potential measured in tens of millions of pounds totalling over £100m over the next decade if an appropriate structured approach can be determined. Clearly further research is required on the question of how to identify beneficiaries and assess their benefits in order to facilitate the introduction of this approach.

3.6 Summary and recommendations

3.6.1 Local authority bond schemes

In order to progress implementation of local authority bond schemes it is recommended that the Treasury is requested to investigate the following matters in greater detail:

- The introduction of an overseeing corporate body possibly a company with a relatively limited share capital, all of which should be held on trust by the government for the benefit of the communities of the UK recognised as being at risk from flooding.
- Investigate the case for treating interest on the bonds tax free and thereby encourage pension and life funds to play a greater role in channelling savings into flood defence and other infrastructure projects.
- Review the mechanisms designed to hold down the cost of capital to ensure that the cost of this form of borrowing is rendered viable for local authorities.

Given government support local authority bonds are a practical way forward being relatively straightforward to implement; the benefits for the flood affected areas of the UK would be significant and the UK pension industry would benefit from a secure investment fund.

3.6.2 Loans based on reduced insurance premiums

It is recommended that it is not appropriate to attempt introduce a mechanism designed to raise income to provide loans based on reduced insurance premiums.

3.6.3 Business rates supplements

The use of business rates supplements offers a viable approach and the prospect of significant funding over the next decade and therefore it is recommended that the LGA's Environment Board is encouraged to promote the option. It is also recommended that Defra and the EA are urged to support pilot financing projects with local authorities.

3.6.4 Levy additional to council tax

- General levy across local authority areas

  The use of a general levy across local authority areas offers a viable approach and the prospect of significant funding over the next decade and therefore it is recommended that the LGA's Environment Board is encouraged to promote the option. It is also recommended that Defra and the EA are urged to support pilot financing projects with local authorities.

- Levy upon beneficiaries – capital and service charges

  It is clear that there is significant annual income potential measured in tens of millions of pounds totalling over £100m over the next decade if an appropriate structured approach to the introduction of levies upon beneficiaries can be formulated. Further research is required on the question of how to identify beneficiaries and assess their benefits in order to facilitate the introduction of this approach. It is therefore recommended that Defra and the EA are requested to fund this research and thereafter support pilot financing projects with local authorities.

4. New funding options - tax increment financing and asset-backed financing

4.1 Overview

Recently two new options have been identified both of which involve raising capital that will be repaid through future revenue streams. These options are TIF and asset-backed financing and are considered in this section.

TIF is widely used by local authorities in the USA as a means of financing infrastructure schemes. It is not yet available to authorities in the UK but appears to be under consideration at senior levels in government. In summary TIF is an approach where a local authority raises finance against the expectation of higher property tax revenues from the expected uplift in tax from property and house price increases over time and the growth in property and households paying the property tax from new developments.

Asset backed financing is not a new type of funding but a difference in approach. It describes the method of financing where the assets become the primary basis for the lending decision of the lender. Asset financing differs in technique and structure and governments have created legal environments to promote this form of financing. The simplest form of asset-backed financing is a secured loan and there are numerous variants, including operating and financial leases, instalment sale, hire purchase, conditional sales, securitisation and mortgages.

Both TIF and asset-backed financing methods require significant support from government to be successful. Further research is required on how to introduce these mechanisms. However there again may be interest in establishing some pilot schemes which lend themselves to effective public and private sector partnerships. It is therefore recommended that Defra and the EA are requested to ascertain Treasury views on these options and, if supported, be requested to fund this research and thereafter support pilot financing projects with local authorities.

4.2 Suggested sources of funding

The funding of flood defence infrastructure projects has been the subject of extensive debate over recent years. It is clear that major investment is needed in the future but many suggested sources of finance and the related funding mechanisms vary widely. Two principal options – TIF and asset-backed financing – are considered below. Both options require powers enabling councils to borrow against future gains in business rate income or other future revenue streams.

4.3 Tax increment financing (TIF)

TIF is widely used by local authorities in the USA as a means of financing infrastructure schemes. It is not yet available to authorities in the UK but appears to be under consideration at senior levels in government. In summary TIF is an approach where a local authority raises finance against the expectation of higher property tax revenues from the expected uplift in tax from property and house price increases over time and the growth in property and households paying the property tax from new developments. It is difficult to capture the tax yield because in Britain at present all the tax yield goes to the Treasury, except for the council tax. There would have to be a way of the Treasury allowing the local authority to capture at least part of the tax yield.

TIF is widely seen as a means of accessing finance that would not ordinarily be available, and it is currently being championed by the All Party Urban Development Group (APUDG), the Core Cities group and professional services company PricewaterhouseCoopers, as well as regional organisations such as the Northern Way. While some organisations have been recommending its use for more than a decade, the TIF model has yet to come to fruition in the UK. It is argued that this is because there has not been a need for the process before now as high property prices have kept the market buoyant. However with the recession deepening, there is now acknowledgement that it will be much harder to fund infrastructure and regeneration in future due to a scarcity of public and private sources of finance. As a result, the profile of alternative funding mechanisms has grown in recent months.

There are significant risks attached to this form of capital financing. The principal risks remain with the organisation that made the investment in infrastructure in the first place, as they will have taken on the risk of recouping their investment from future business rates. This is primarily the local authority but could be a private developer or a partnership between the two. If a local authority is responsible, then it would have to meet any shortfall via conventional methods, such as drawing on reserves, land sales, council tax or business rates.

It has been suggested that pilot schemes could take place without any changes to existing legislation. However, since reforms of local government finance in the 1980s and early 1990s, the income from business rates flows directly back to the Treasury, and is currently unavailable as a revenue source for local authorities. This means that the government would have to change its existing policy and legislation before a TIF could be implemented.

The issue of bonds is usually a key part of a TIF scheme. While the Treasury has objected in the past to proposed bond issues by councils, there is already experience in the UK of local authorities issuing bonds. However, in 2005, Birmingham City Council raised £250m through bonds to refinance old debt on the National Exhibition Centre.

While the concept of TIF is fairly simple, putting it into practice is rather more complex. It would require enabling legislation for a full national scheme, in order to divert business rates from the Treasury to local authorities, with strict preconditions and appropriate oversight. Councils will most likely take on the debt through prudential borrowing, at least initially. Most critically, though, is how to underwrite this type of funding. TIF poses a substantial risk should plans go awry, with repayments taking up to 25 years. However, as the APUDG argues, the cost of private financing may be prohibitively high if there is no central government guarantee.
The principal advantage is that TIF schemes enable infrastructure to be financed to precede development. Moreover US experience suggests that the process of TIF schemes assists the greater financial and place-shaping power in local government as opposed to the centralised UK system. The principal disadvantage is that new legislation would be needed to enable local authorities in the UK to mirror the approach because council tax could not be used in this way as it is not the equivalent of US property tax.

The main advantages and disadvantages of TIF are summarised in Table 8 below.

Table 8: TIF advantages and disadvantages

TIF Advantages	TIF Disadvantages
• Enables infrastructure to be financed to precede development. • Recovers the capital costs of the works from the subsequent assets and the value attributable to the infrastructure. • US experience suggests that process assists the greater financial and place shaping power in local government as opposed to the centralised UK system. • Provides a real incentive for local authorities to work with developers to deliver schemes because there is an evident financial benefit through enhanced infrastructure funding. • In the US the system is backed by extensive consultation and engagement with local communities.	• New legislation would be needed to enable local authorities in the UK to mirror the approach adopted in USA. • Local authorities could use the flexibility of business rates supplement if the process replicated the benefits of the US property tax backed system. • A variation of the approach might be achieved within current legislation if the local authority kept within its prudential borrowing limits. • Implementation of TIF in the UK would count against net public sector debt. In effect the government would need to permit large scale increased borrowing by local authorities. This would seem to be unlikely however there may be scope for pilot schemes that would provide the necessary degree of case study evidence before it could be applied uniformly.

Conclusion

The TIF approach is an established means of financing major infrastructure schemes in the USA and appears to have significant added value elements for local government. It is clear that TIF is being considered in government and in Scotland Edinburgh City Council has put forward a number of schemes which may be financed in this way. It is reported that a waterfront regeneration project requiring £50m of upfront investment is needed to fund, among other elements, a lock gate, a new pier and a new road on the waterfront. The council could receive up to £310m in additional business rates over the next 25 years, and attract £450m of investment into the area. There are significant political, legislative economic obstacles to overcome to see an approach on US lines adopted here. However there may be interest in establishing some pilot schemes which lend themselves to effective public/private sector partnerships.

4.4 Asset-backed financing

Asset backed financing is not a new type of funding but a difference in approach. It describes the method of financing where the assets become the primary basis for the lending decision of the lender. Asset financing differs in technique and structure and governments have created legal environments to promote this form of financing. The simplest form of asset-backed financing is a secured loan and there are numerous variants, including operating and financial leases, instalment sale, hire purchase, conditional sales, securitisation and mortgages.

From the 1980s the role for local government envisaged by central government was to manage change on a very large scale and in so doing needed to attract developments and raise capital for regeneration and infrastructure that were both successful in their own right and contributed to the success of their local areas. Central government placed local government in an enabling and pump priming role using their land and buildings and powers to regenerate the physical and social infrastructure and to create conditions necessary to attract private sector investors and developers to undertake commercial developments. It is clear that the use of local authority assets as a conduit to raising finance for these purposes is again under consideration.

This approach had mixed success but some major authorities established innovative and successful partnerships with private sector developers and contractors that realised multi-million pound developments that continue to produce substantial economic benefits for their areas today.

The projects are under the control of the local authority concerned and require the establishment of partnerships with private sector partners often in accordance with appropriate procurement rules. The authority may determine the nature and extent of the assets utilised for the purpose of enabling its private sector partner secure conventional borrowing or investment. These assets include:

- Land
- Buildings
- Other assets (IT systems, equipment)
- Staffing resources (including the secondment of a number of the Council's planning and economic development division to assist the realisation of the partnership objectives)
- Planning permission subject to constraints
- Limited capital and revenue funding
- Access to EEC and other grant aid

The main disadvantages are:

- Establishing joint ventures is a complex and resource intensive at senior levels.
- To be successful this approach requires the identification of effective private sector partners and the definition of mutually beneficial objectives. These require careful monitoring to ensure effective realisation and value for money.

The advantages and disadvantages of asset-backed financing are summarised below.

Table 9: Asset-backed financing advantages and disadvantages

Asset-backed financing Advantages	**Asset-backed financing Disadvantages**
• The projects are under the control of the local authority concerned and require the establishment of partnerships with private sector partners often in accordance with appropriate procurement rules. • The authority may determine the nature and extent of the assets utilised for the purpose of enabling its private sector partner secure conventional borrowing and/or investment. • Joint ventures and other forms of partnership can provide excellent examples of what can be achieved when the resources of public and private sectors are used to realise mutually agreed objectives. In the difficult financial circumstances of 2010 this kind of approach will be needed to deliver major public and private sector projects, including infrastructure schemes, over the next decade.	• Establishing joint ventures is a complex and resource intensive at senior levels. • To be successful this approach requires the identification of effective private sector partners and the definition of mutually beneficial objectives. These require careful monitoring to ensure effective realisation and value for money. • A special purpose company structure may need to be formed as the principal delivery vehicle. • Most importantly the authority will need to identify the assets and resources to be devoted to the enterprise. • The approach does not lend itself to the financing of major infrastructure schemes unless they form part of a comprehensive development package. There will be a need to trade off non commercial elements against commercial elements of the development package.

Local authorities have powers in Section 2 of the Local Government Act 2000 enabling them to do anything considered likely to achieve the promotion or improvement of the economic, social or environmental wellbeing of their areas. In exercising this power, an authority must be satisfied that some or all of these objectives will be met and should also have regard to its own community strategy and the objectives when deciding whether to make some form of assistance available to facilitate the flood defence work.

Local authorities also have power under Section 123 of the Local Government Act 1972 to dispose of land in any manner it wishes. The only constraint on this power is that the disposal must be for the best consideration reasonably obtainable, unless the Secretary of State consents to the disposal at less than best consideration. The Secretary of State has given a general dispensation to local authorities to dispose of land at less than best consideration as long as any under value for which the land is disposed of does not exceed £2m in total. A council would, therefore, have power on the face of it to dispose of land at less than best consideration to facilitate the flood defence works, as long as it was satisfied that this would promote the economic, social or environmental wellbeing of the area and that the council had due regard to its community strategy when making that determination. If a disposal at an under value was to take place, relevant government guidance makes the point that authorities should be aware when making any decision of their need to fulfil their fiduciary duty in a way which is accountable to local people and make sure that they obtain the view of a professionally qualified Valuer as to the likely amount of under value, so that they are fully informed of all the relevant circumstances. If any disposal at an under value was envisaged, therefore, the executive would need to obtain appropriate valuation advice from the property services manager before making a determination.

4.5 Summary and recommendations

Both TIF and asset-backed financing methods require significant support from government to be successful. Further research is required on how to introduce these mechanisms. However there again may be interest in establishing some pilot schemes which lend themselves to effective public and private sector partnerships. It is therefore recommended that Defra and the EA are requested to ascertain Treasury views on these options and, if supported, be requested to fund this research and thereafter support pilot financing projects with local authorities.

5. Role of the insurance and water industries

5.1 Overview

It is important that the LGA monitors carefully the outcome of forthcoming discussions between the ABI and the government on the existing agreement in relation to the future of flood insurance. Thereafter there is considerable scope to conduct further research in association with the ABI on the link and relationship of insurance premiums and increased funding sources from local authorities. The LGA should consider the opportunity for greater liaison with the ABI with a view to exploring options and formulating mutually beneficial and viable funding options.

There is an opportunity for local authorities to work closely with water companies in sourcing additional funding sources through partnerships and joint venture arrangements. It is recommended that the LGA reviews these opportunities in greater detail and thereafter request Defra and the EA to support pilot partnership or joint venture financing projects where appropriate.

5.2 Introduction

The insurance and water industries have distinct and separate roles in securing the aims and objectives of the FWM Act. It is clear that any review of funding options should take account of the existing and potential roles of the insurance and water industries. This section outlines the opportunity for the involvement and engagement in financing options of both the insurance and water industries.

5.3 Insurance industry

5.3.1 Insurance industry concern over the ability to sustain flood risk insurance cover

A statement of principles was agreed by the ABI and the government on flood insurance and introduced in 2001. The agreement committed insurers to continue to provide flood insurance under certain scenarios and the government to manage the risk from flooding. The ABI is the trade association for Britain's insurance industry. It has over 400 member companies providing over 94 per cent of the insurance business in the UK. It represents insurance companies to the government, and to the regulatory and other agencies, and is an influential voice on public policy and financial services issues.

The ABI and the government agreed to a revised statement of principles to operate from 2008 until 2013. The agreement includes continuing to make standard insurance available in areas of significant risk in certain circumstances.

The insurance industry announced its general intensions on insurance and flood risk, including for example its intention to align provision and premiums with risk and what it will be expecting of new developments built on the flood plain. The agreement removes the threat that many properties in high risk areas might become uninsurable but it does not affect the cost of cover or policy terms, which will continue to reflect the level of risk presented. The government and the ABI stated that owners of properties in areas at significant flood risk built after January 2009 can no longer assume they will receive cover under their domestic insurance policies, necessitating more costly stand-alone insurance cover.

5.3.2 Impacts of climate change and the potential increase in the costs of insurance premiums

At the LGFF meeting in July 2010 Nick Starling, Director of General Insurance and Health at the ABI indicated that the risk of flooding in the UK will increase due to climate change. This could lead to dramatic rises in insurance premiums for homeowners and businesses and make some areas of the country uninsurable. The ABI considers that flood risk is the main catastrophic risk in the UK and the pattern and nature of floods in recent years suggested that global warming was starting to have an impact: the severe floods in the summer of 2007 and the Cumbrian floods last year were caused by heavy downpours that did not dissipate.

It is clear that the ABI is concerned about the increase in areas of flood risk with the result that some areas may become impossible to insure. In some cases it is suggested that inappropriate planning decisions are to blame where new homes were built on flood plains. The ABI has warned that it may not insure new developments in flood plains if the properties were granted planning approval against EA advice. The ABI has prepared forecasts showing that if temperatures rise by 2°C average annual insurance losses would increase by £47m and the resultant risks could push up the price of insurance by 16 per cent. A temperature rise of 44°C is estimated to increase annual losses by £80m and premiums could go up by 27 per cent, while an increase of 6°C would lead to additional annual insurance losses of £138m, pushing up prices by 47 per cent.

5.3.3 Role of the insurance industry in response to government flood management strategy and investment

The ABI argues that while public spending is being squeezed, cutting back on investment in flood defences would be a false economy due to the high cost of repairing flood damage. Nick Starling indicated at the LGFF that the 2007 floods, which hit Northern Ireland, Yorkshire, the Midlands, Gloucestershire, Worcestershire, Oxfordshire, Berkshire and South Wales, cost the insurance industry £3bn while the Cumbrian floods last November led to property and motor insurance claims worth £200m. Nick Starling suggested that the ABI is concerned to ensure that flood insurance continues to be widely available and competitively priced beyond 2013. However the ABI considers the government should maintain the agreement to provide a long term flood management strategy backed by the right level of investment to enable this to happen.

The ABI clearly believes that a long term investment strategy, adequately funded, is the best way to manage the growing flood threat. This is deemed to be a prerequisite of helping to ensure that the flood insurance protection relied upon by millions of householders and businesses remains widely available. The insurance industry's commitment to offering cover to people at risk of flooding is in place until 2013. But crucially, the continued provision of flood cover was based on the understanding that the government would invest more money in flood defences. This commitment, though, was made before the recession took hold, and while the government says the spending pledge will hold until 2011, there can be no guarantees after this date.

By 2011 the government will have taken steps to introduce massive spending cuts in public sector expenditure and the chances of extra funding being found to keep building flood defences appear remote. At the time of the revision to the Statement of Principles in 2008 and in the light of the 2007 summer flooding that cost billions of pounds, several insurers suggested that they may have to stop offering policies to those in high-risk areas. In response, the government pledged to spend an extra £1.5bn on defences between 2009 and 2011. It was seen as the minimum needed to keep insurers onside. However, with the threat of global warming and rising sea levels, the ABI expects much more will have to be spent over the coming decades.

In a House of Commons oral question session in July 2010 there were a number of issues raised by MPs regarding flood defences in their constituencies. In response Caroline Spelman, Environment Secretary of State, stated that spending on flood protection is an absolute priority for the new administration. Ms Spelman also went on to confirm that the coalition agreement states commitment to taking forward the findings of the Pitt review on the 2007 floods. The government is currently considering how best to put this into effect, against the difficult spending background. The Minister indicated that the EA was ahead of the game with the amount of flood defences it had provided and there is no question of this important front line service being compromised. Whilst these verbal commitments from the Environment Secretary are encouraging it is clear that the pressure is on all government departments to cut spending and the impact on flood defence spending remains unknown.

5.3.4 ABI and government discussion of the Statement of Principles Agreement

Nick Starling indicated at the LGFF that a meeting between the government and the ABI is to take place later this year to consider the application of the Statement of Principles Agreement. At this stage it is unknown whether significant changes in insurance arrangements will emerge on the lines of the introduction of stand-alone and, possibly, compulsory insurance cover. In that event consideration might also be given to innovative funding tools centred on insurance including property owners investing in defences in one form or another in return for advantageous insurance policy terms. This would shift costs to property owners and developers while also reinforcing the effects of planning and building codes and environmental setbacks.

A review of the agreement may lead to consideration of key issues including: compulsory buildings insurance for all; compulsory insurance for erosion, recession and flood risk; government indemnity for erosion, recession and major flood risk funded by compulsory payments from insurance companies and assurance arrangements required against known risk. New funding sources may then be considered, including operated through government with payment through general taxation or the flood and coastal defence budget, operated as a government levy on insurance companies, operated by insurance companies with support from government, funded through a betterment levy on protected properties and by raising premiums to meet risk. Imperfect information has prevented insurers from charging risk based premiums and, historically, insurers have not taken this approach but provided relatively comprehensive coverage by cross-subsidisation – charging those at no risk. This often means that householders do not appreciate the true costs of flood risk and they face no incentive, in insurance terms, to reduce their exposure to risk. This approach may be perceived as inequitable to those at minimal risk because they are contributing to the costs of paying for the exposure to a risk that they themselves do not face.

It seems unlikely that some of the options would be supported by the insurance industry without a financial contribution of some sort from government. This is something that may be considered by government and the ABI in any review of the Statement of Principles to ensure it is up to date and fit for purpose. The government and the ABI both want to ensure that flood cover remains as widely available as possible for the public. The Statement of Principles commits insurers to continuing to offer flood insurance to existing customers where the flood risk is adequately managed. However following the major floods of summer 2007, and in light of the increasing number and extent of floods linked to climate change, the government and the insurance industry are likely consider the need for a robust review of current arrangements. It is clear that there is a need for a commitment to a long term, flood-management strategy together with a commitment to invest consistently over the long term. The priority of the insurance industry is to ensure that flood insurance remains as affordable and widely available as possible, so that consumers and businesses can continue to be able to protect themselves from the financial cost of flooding.

5.4 Water Industry

5.4.1 Water industry and the FWM Act

The water industry, comprising water companies, Water UK and Ofwat, was generally supportive of the recommendations in the Pitt Report and, subsequently, the provisions of the Flood and Water Management Bill largely because the extreme flooding experienced in water company regions in 2007 partly prompted the legislative response. In common with many households and businesses, some water companies were significantly affected by the flooding and have since been involved in major reinstatement programmes costing multi-millions of pounds. For example, Yorkshire Water has spent £39m to resolve sewer flooding at 386 properties and outdoor flooding at 88 locations by 2010 and intends to spend an additional £55m before 2015.

Since the flooding the water industry has played an active role in developing a multi-agency approach to water management planning and flood emergency response in partnership with regional local authorities and with the EA. The industry considers this is the best way to manage these risks on behalf of their customers and communities and therefore fully supports the aims of the FWM Act, which received Royal Assent on 8 April 2010.

The water industry has indicated that the FWM Act has created significant challenges for water companies. These relate to the need to play an important role in developing integrated flood risk management processes and systems when historically there have been problems in gaining cooperation from the diverse range of organisations with an interest in the management of flood risk. The regulations also introduce the duty of cooperation between relevant authorities. Specific issues also include:

- Local authorities are required to develop local flood risk management programmes that could impose mandatory requirements on water companies, which may have implications on the balance between water companies and consumers, and on Ofwat's role; and
- A duty has been placed on water companies to provide information to the EA which it reasonably requires for its FCERM functions. This information is to

be provided in the form specified and within the period specified by the EA. The cost implications of compliance are uncertain.

The water industry also recognised that the FWM Act provides some clear benefits. These include:

- The transfer of the responsibility for private sewers passes to water companies, which the water industry believes will deliver significant customer benefits by passing the responsibility to water companies who are appropriately funded to efficiently carry out this activity; and
- Water companies have become a statutory consultee for the purpose of approval of any new connections and implemented in line with new guidelines for SUDS and the removal of the automatic right to connect to the sewerage system where developers have not adhered to these new guidelines.

5.4.2 Water industry and the flood risk funding options

Given the water industry's important role in the development of flood risk management systems designed to prevent future flooding in the UK and commitment to working closely with a number of agencies and authorities to share knowledge, expertise, experience and develop integrated strategies it is clear that there is scope to consider the practicality and opportunity of developing joint funding approaches.

The water industry is a private industry where the private supplier builds the infrastructure and reclaims the cost through billing customers for usage through water rates. The industry is heavily subject to economic regulation and their user charges are based on a pre-determined rate of return on their regulated asset base as well as the cost of the water supplied.

5.4.3 Water and sewerage charges

When floods occur it is understandable that people want to point the finger and look for someone to blame but river and surface water flooding is usually the result of heavy, sustained rainfall. The problems have been exacerbated in the past by the confusing patchwork of who is responsible for what and with a lack of clarity over which organisation has overall responsibility for providing the funding for flood defences at local levels. An immediate reaction to crises in the past has often led to public statements from prominent politicians and commentators to the effect that the public must pay through increased water charges. This is usually followed by a focus on under-investment in flood prevention infrastructure by central and local government and, since privatisation, the water companies.

Water companies will point to the significant investment made in response to the 2007 floods. However critics may also point to shortfalls in capital investment in

2005/6 whereby water companies were expected to £4.3bn on infrastructure but in a cost cutting exercise monitored by Ofwat, they invested only £3.4bn. It is important to emphasise that water companies work with the regulator Ofwat to develop a consistent and coherent framework for assessing the vulnerability of infrastructure assets to flooding and power loss and include in their business plans capital investment and financing measures to improve their resilience. In effect water charges are increased in accordance with regulatory processes to meet the capital financing requirements for flood works which are the statutory responsibility of the water companies.

It has been suggested that funding could be collected through water companies' bills and passed to local authorities. This approach was also discussed at the LGFF in July 2010 as part of the detailed consideration of the funding options. For over a decade the water industry has considered this approach to be completely inappropriate. Government policy, as stated in its guidance to the water industry regulator under the Water Industry Act 1999, indicated that a surface water drainage charge levied on customers through their water and sewerage bill was not a viable option. The government’s objective was that customer bills should be transparent and fair, and bills should be broadly in line with the use made of the different components of the sewerage system, one of which is surface water drainage.

An additional surface water drainage charge for flood defence would run counter to the government’s objectives and would affect some customers only, those who do not benefit from a surface water rebate from the sewerage service company. It would be a tax collected by sewerage undertakers which does not seem appropriate and by definition would increase bills, which are regulated by Ofwat.

The water industry argued that sewerage undertakers are not well placed to collect taxes on behalf of government because they do not have the information relevant to benefit claimants or hardship cases which the proper administration of a tax system requires. The water industry supported this policy indicating that water and sewerage charges are relatively blunt instruments which are not suited to tax collection.

5.4.4 Role of water companies in sustainable drainage systems (SUDS)

The Flood and Water Management Act includes a series of measures designed to increase the use of SUDS in new developments. The construction of any drainage system – defined as any structure designed to receive rainwater except a public sewer or a water course – will need to be approved and will need to comply with national standards for sustainable drainage that are to be drawn up. Where connection to the public sewerage system is proposed, the appropriate sewerage undertaker must be consulted before approval. This will allow undertakers to forecast the likely surface water drainage demands on their system.

Before the FWM Act was finalised there was some debate as to who is best placed to adopt and maintain SUDS in the future. The government opted for local authorities taking on this role notwithstanding the fact that local authorities raised concerns about the skills and resources they have to undertake this activity. However, many in the Water Industry believe that water companies remain the most appropriate bodies to pick up the long term responsibility for SUDS.

The Pitt Review did not recommend that local authorities adopt and operate SUDS suggesting instead that this was a matter for government to consider. The draft Bill did appropriately address the issue of approval of SUDS, placing this with a local authority-led SUDS advisory body and including water companies in this process but it was less clear on subsequent fully-funded adoption and operations of SUDS systems.

The water industry suggested that adoption and ownership of new SUDS more appropriately lies with water and sewerage companies ("the sewerage undertaker") because:

- It is consistent with their statutory duty to "effectively drain";
- The SUDS will in many cases connect to the public sewer. The SUDS may therefore exist between household drains and the sewer network, both of which will be the responsibility of the sewerage undertaker. Ownership and operation will enable water companies to manage the whole network more effectively and efficiency;
- Water companies have the skills and resources to carry out this work;
- The funding would be obtained through the price control mechanism; and
- In their evidence to the Environment, Food and Rural Affairs Select Committee, Ofwat indicated a willingness to consider this approach.

It was suggested that following approval of SUDS related to new developments by the SUDS Advisory Board and built in line with the new guidelines, SUDS would be adopted and operated by water and sewerage companies, also known as the sewerage undertaker.

It is clear that the water industry does not support the suggestion of funding being collected through water companies' bills and passed to local authorities. Although adoption and ownership issues are set out in the new legislation the supporting funding routes for this activity are still unclear. This may provide an opportunity for consideration by representatives of water companies and local authorities of an effective joint funding approach. In that event there are likely to be cost implications for Ofwat and the water industry to consider discuss, along with property law issues.

5.4.5 Sale of flood defence assets to water companies

In early spring this year it was suggested that the Treasury was considering the sale of certain flood defence assets including the Thames flood protection barrier, defences on the Ouse and Severn rivers and other assets to generate capital receipts and reduce the flood defence budget. A report in the Times linked the suggestion to a report by the Institute of Fiscal Studies naming Defra, as one of the departments likely to be worst hit by the spending cuts aimed at reducing the budget deficit. The institute estimated that Defra's £3bn budget could be reduced by a third.

It was suggested that Treasury proposals would allow private companies, in particular water companies, to acquire and operate the assets, with the charges passed on to consumers — either directly or through a levy on the council tax. During a debate in the House of Commons on 13 July 2010 Richard Benyon MP addressed the matter directly stating that the government has no plans to privatise flood defences contrary to reports in the press. He indicated that the government will be looking, where appropriate, for contributions from beneficiaries to new schemes and other sorts of levy-funded operations.

5.4.6 Partnerships and joint ventures

In relation to partnership and funding issues the water industry has also drawn attention to the potential for regulated project based companies to be created under the new legislation to fund and deliver suitable infrastructure projects. This could allow water companies to join forces to create consortia capable of undertaking projects of a size that individual companies would struggle to fund and manage.

5.5 Conclusion

The FWM Act has set out a blueprint for the future including the steps to be taken to protect key infrastructure and to develop arrangements through partnerships and other relationships designed to provide a combined public sewerage system and the effective management of huge storm water flows in future. Local authorities, water companies and agencies will need to work more closely than in the past to develop more sustainable integrated urban drainage systems to provide effective fully funded flood defences. It is understood that the water industry is determined to undertake an important role in securing the aims and objectives of the legislation by adapting their systems where necessary to develop sustainable integrated urban drainage solutions.

5.5.1 Insurance industry

With regard to the insurance industry it is important that the LGA monitors carefully the outcome of forthcoming discussions between the ABI and the government on the existing agreement in relation to the future of flood insurance. Thereafter there is considerable scope to conduct further research in association with the ABI on the link and relationship of insurance premiums and increased funding sources from local authorities. It is recommended that the LGA considers the opportunity for greater liaison with the ABI with a view to exploring options and formulating mutually beneficial and viable funding options.

5.5.2 Water industry

There is an opportunity for local authorities to work closely with water companies in sourcing additional funding sources through partnerships and joint venture arrangements. It is recommended that the LGA reviews these opportunities in greater detail and thereafter request Defra and the EA to support pilot partnership or joint venture financing projects where appropriate.

6. Community and development financing options

6.1 Overview

Over several years a number of possible developer funding options have been considered with the objective of introducing new arrangements designed to create a simpler, fairer, more transparent and predictable system of standard charges, capable of unlocking additional funding for flood defences and other infrastructure that is required to deliver sustainable local communities. These options included: a statutory development charge payable in respect of specific flood defence costs attributable to individual flood plain developments possibly in the form of a development connection charge; a flood plain levy and surface drainage charges.

In October 2007, the Labour government introduced regulations made under the Planning Act 2008 provided for the CIL. CIL is a voluntary mechanism that allows local authorities in England and Wales to levy a standard charge on most types of new development, to fund the infrastructure needed to support development in their area. The regime for this new charge was due to start in April 2010 following lengthy consultations.

It is difficult to estimate how much money will be raised by CIL as it is not known how many LPAs will impose the charge, nor the rate at which it will be charged. The DCLG Impact Assessment on CIL in February 2010 indicates that it has the potential to raise an estimated additional £700m a year of funding by 2016. DCLG suggests that the flexibility to mix funding sources at a local level will enable local authorities to be more efficient in delivering the outcomes that local communities want. The CIL regime offers a number of advantages over the current system of planning obligations together with some disadvantages. However the coalition government stated on 1 July 2010 “The government are currently considering the future of the CIL. We will make a public announcement shortly”.

In light of the significant potential income to be derived from the successful introduction of CIL it is important that the LGA monitors closely the government’s consideration of the future of the proposed levy. Depending upon the outcome the LGA will need to consider the practicalities of introducing the levy and the steps to be taken or examining the implications of any decision to change or cancel its introduction.

6.2 Debate on arrangements for obtaining financial contributions from developers

This section considers the opportunity to secure greater financial contributions from developers and other commercial or community beneficiaries, so that costs are fairly shared and multiple benefits achieved from new development.

During a group discussion of alternative financial options at the LGFF meeting in July 2010 the question of developer culpability arose in relation to the causes of flooding. Broadly it was argued that floods are in fact the result of building on flood plains and other once open land. Successive governments have allowed this to happen with the taxpayer faced with the financial burden. In consequence it was argued that developers should be required to make to make significant financial contributions towards flood defences, together with financial contributions towards the construction of increased drainage to cope with land being built on.

The Environment Audit Committee Chair, Tim Yeo MP, has added to the debate recently by suggesting that there is a need to be more creative in securing private sector investment to meet the cost of flood defences. In the case of new developments he has indicated that planning authorities should consider securing financial contributions from developers not directly related to the specific development project concerned i.e. residential, commercial and retail schemes. His view is based on the argument that development is of concern to the community and there is a need to accelerate investment in flood-prevention measures so there is a need to supplement the taxpayer liability with developer contributions. In effect developers should be held liable for creating pressure on the infrastructure and be required to pay for the benefits arising rather than the taxpayer or homeowner. In this context some proposals have centred upon developers responsible as a collective not individually making a 65 to 75 per cent contribution to the flood defence costs with the balance from central government. This approach in turn may be augmented by a supplement on business rates and retrospective levy on communities options outlined in sections 2 and 3 above.

Notwithstanding these arguments the adoption of new and increasing sources of funding should not impact inequitably on developers, existing businesses and householders. Similarly the cost of flood protection measures benefiting an area should not be obtained only from developers. In the case of new development, developers will be able to decide whether a project remains viable when any additional costs have been taken into account. With existing development, business and householders' insurance premiums have risen steeply in recent years, adequate insurance cover refused in some instances, and a further retrospective levy is capable of impacting disproportionately on the local economy in some areas.

6.3 Planning regime and provision for flood defence works

Major development schemes provide benefits to communities including opportunities for economic development, jobs and tourism. Government policy sets out that new development in areas subject to flood risk should make provision for flood defence and that beneficiaries should make an appropriate contribution to the cost. Guidance to LPAs issued over the past decade indicates that they should take steps to ensure that development is not brought into use until appropriate works have been carried out. This can be achieved by requiring that development does not take place until the necessary flood defence measures are in place or by entering into planning obligations under section 106 of the Town and Country Planning Act 1990. In this way the planning regime has been designed to ensure that no further development takes place in flood plains, or other areas subject to a high risk of flooding, unless either adequate flood defences are already in place, or these are provided by the developer as part of the project.

Accordingly the EA and local authorities have secured financial contributions in relation to flood defence provision from organisations such as developers and industries that directly benefit to ensure that appropriate provision is made to fund flood defence works consequential to new development in the flood plain. The contributions take account of the need for works both upstream and downstream of the development, and over the lifetime of the defence.

Since 2001 the scope for securing significant financial contributions from developers has been governed by Planning and Policy Guidance 25 (PPG25) on Development and Flood Risk. The guidance indicates that the susceptibility of land to flooding is a material consideration in determining planning applications. The land concerned may be that subject to the application or elsewhere if the development has flood implications there.

In making planning applications developers are required to consider the specific risk of flooding to the development being proposed over its currently expected lifetime and its possible effects on flood risks elsewhere in terms of its effects on flood flows and flood storage capacity and the run-off implications. In some circumstances development is permitted that requires the provision of flood defence and mitigation works. Such provision is generally funded by the developer and is only acceptable provided it is consistent with the relevant flood-risk management policies and does not have a significant adverse impact on flood flows or storage. After the application of a number of relevant planning considerations, the LPA was required to negotiate an appropriate financial contribution from the developer in accordance with section 106 of the Town and Country Planning Act 1990. If agreement was not reached on the provision of that contribution, the application would be refused. Government and industry commentators had for many years considered that this is process was often slow and unpredictable, based on ad hoc negotiations conducted in private.

Moreover detailed research indicated that the burden of funding was inherently unfair falling primarily on major developments. For example an impact assessment prepared by the DCLG, indicated that only 14 per cent of residential planning permissions and seven per cent of those for offices had planning obligations attached to them.

6.4 Community and development funding – case studies

The EA has welcomed approaches designed to provide funding for flood defence projects, which involve development contributions together with other funds raised by local communities. At the LGFF, Chief Executive of the EA, Dr Paul Leinster, noted that some communities have already adopted this approach with the assistance of the EA and Defra. The EA has published some examples of this approach including:

- **Hereford -** Asda contributed £2m as part of the planning conditions for a supermarket in the town, in addition to constructing 440m of flood defence. The total cost of the scheme was £7.5m and it provides protection to 196 properties including 25 listed buildings.
- Appleby - This scheme, and another in Sandside, South Lakeland, was jointly conceived and administrated by the EA and Eden and South Lake District Councils. It formed part of the national Defra £500,000 pilot flood resilience project where local authorities and the EA were encouraged to work together in different ways to promote a resilience scheme. £90,000 and £80,000 of grant money was received by Eden and South Lakeland Councils respectively, directly from Defra. This arrangement meant that the councils could use their grant distribution powers to fund individual property protection schemes. The average amount of grant issued to the 46 properties that took part was approximately £1300. The property owners were expected to fund any work in excess of the grant available for their particular property. Approximately 26 of the properties that took part in the Appleby scheme benefited from their defences in the November 2009 flooding. They would have flooded if their resilience scheme funded defences had not been in place.
- Leeds city flood alleviation -The project will increase the level of protection to Leeds city centre but makes a relatively low contribution to reducing flood risk for households. However, the project is likely to enable significant economic and financial benefits for the local and regional business, commercial and development or regeneration sectors. In line with EA's FCRM external contributions policy, these benefits are sufficient to justify a contribution of at least £50m towards the £178m scheme's total cost. Discussions, consultations and negotiations are ongoing between the EA and Leeds City Council on how this value of contribution can be realised to secure the proposed benefits to the city.

- Bawdsey **-** In 2007 a group of local landowners and residents formed the East Lane Trust to raise £2.2m to implement a coastal protection and flood defence scheme for a 250 meter section of coast. The money was raised by selling plots of land in nearby villages. In 2007, the government granted special permission to allow 26 homes to be built on the plots which were not previously available for residential development. The money raised was given to the Bawdsey District Council to commission a sustainable coast protection scheme which was completed in summer 2009.

These examples provide useful case studies illustrating how developer contributions can provide significant sums in support of flood defence costs.

6.5 Developer funding options

Over several years a number of possible developer funding options have been considered with the objective of introducing new arrangements designed to create a simpler, fairer, more transparent and predictable system of standard charges, capable of unlocking additional funding for flood defences and other infrastructure that is required to deliver sustainable local communities. These options included: a statutory development charge payable in respect of specific flood defence costs attributable to individual flood plain developments possibly in the form of a development connection charge; a flood plain levy; and surface drainage charges.

A development connection charge would be payable by all developers on the flood plain to recover general flood defence costs not attributable to an individual development The development connection charge is relatively easy to introduce being analogous with the system operated by gas and electricity providers. In those cases, however, there is a direct relationship between the capital cost of providing supplies and the number of properties being supplied. In the case of flood defence works, in order to determine an equitable connection charge there would need to be a finite scheme, with implementation programmed over a firm period, and to be funded via an accurately projected volume of development. This is unlikely to be the situation that applies in any particular instance. There are additional difficulties with this approach in particular the problem of drawing a distinction between the development-specific works required of the developer and the contribution to be made for the benefit of the wider area. Moreover the charge would need to be separated from the new development along with any other income sought for planning gain purposes. These options were rejected because it appeared that these specific charges alone would be unable to generate the funding needed to meet the challenges of the future and to ensure a fair distribution of the burden.

6.6 Financial contributions from developers related to land and property value increases and the CIL

Over the past three decades successive governments have looked at ways of introducing a development tax to capture part of the increase in land value resulting directly from the grant of planning consent. An initial proposal to introduce a planning gain-supplement (PGS) as a national development tax set at about 20 per cent was unpopular both with local authorities, who feared that the revenue would not come to them, and developers, who feared that they would pay the tax but then still have to enter into a planning obligation to pay for the necessary infrastructure.

In October 2007, the Labour government announced the replacement of PGS by a planning charge and thereafter introduced regulations made under the Planning Act 2008 provided for the CIL. This is more locally based than planning gain supplement. CIL is a voluntary mechanism that allows local authorities in England and Wales to levy a standard charge on most types of new development, to fund the infrastructure needed to support development in their area. The regime for this new charge was due to start in April 2010 following lengthy consultations. In effect CIL was designed to replace the current system of planning obligations. CIL does this by simplifying the way contributions are made by developers, and mitigating the pooling failure that results because the cumulative impact of individual developments necessitates infrastructure, which individual developers lack the incentive or the resources to fund by themselves.

Care needs to be taken in estimating how much money will be raised by CIL as it is not known how many LPAs will impose the charge, nor the rate at which it will be charged. The DCLG Impact Assessment on CIL in February indicates that it has the potential to raise an estimated additional £700m a year of funding by 2016. CIL is intended to fill the funding gaps that remain once existing sources have been taken into account. It is intended that local authorities will be able to assess their full range of funding streams and decide how best to deliver their infrastructure priorities, including how to utilise CIL. DCLG suggests that this flexibility to mix funding sources at a local level will enable local authorities to be more efficient in delivering the outcomes that local communities want. The CIL regime should also offer a number of advantages over the current system of planning obligations. The advantages are summarised in Table 10 below.

Table 10: CIL advantages

CIL Advantages
•Simplicity: CIL will be fixed standard charges, levied as pounds per square metre of floor space. •Predictability: CIL charging schedules will be published, and developers will be able to predict the size of their potential liability, perhaps months or years in advance of development. •Transparency: draft CIL charging schedules will be subject to consultation with developers, and adopted only after an independent CIL charging schedule examination,.Schedules provide greater transparency over the amount different developers are required to pay. •Fairness: CIL will be levied on most types of new development thus broadening range of developments contributing to local infrastructure. • Efficiency: creates an incentive for consumers /beneficiaries to contribute funding for infrastructure, thereby reducing the under-provision of infrastructure without Government intervention. • Ability to demonstrate the cumulative impact that individual developments impose, thereby reducing the under-funding of larger items of infrastructure. •Legal certainty for LPAs to address the pooling failure linked to the public good characteristics of larger items of infrastructure. •Easier for charging authorities to address cumulative impact of developments, ensuring developers cannot free-ride on others in the community, but rather make a fair contribution to larger items of infrastructure.

It is proposed that DCLG will continue to work closely with local government and industry to ensure that CIL is implemented effectively including the provision of guidance and support for local authorities seeking to introduce CIL. The objective is to monitor the effectiveness of CIL as a means of securing developer contributions and its impact on the wider planning system, including on affordable housing delivery. The primary legislation has been framed in such a way that the CIL regulations can be changed as practice among local authorities in England and Wales evolves over time. DCLG intends to carry out a formal evaluation of CIL five years after regulations come into force. This approach is in recognition of the fact that the implementation of CIL has some significant risks along with other disadvantages concerning the efficiency and effectiveness of the procedures. These disadvantages are summarised in Table 11 below.

Table 11: CIL disadvantages

CIL Disadvantages
• The principal disadvantage is that arrangements are not risk-free.The main problem with CIL centres around the level at which any charges are set. Setting a CIL at too low a level may lead to much needed infrastructure projects being delayed or not going ahead, thus potentially jeopardising further development. • Setting a CIL at too high a level could risk some land not coming forward for development - for example, some brownfield sites that need substantial remediation.ortion of the actual costs incurred. • Safeguards enable LAs to set differential rates of CIL to respond to local economic circumstances. Examiner will test to ensure CIL does not place at risk, the development of the area and make recommendations requiring the LA to set a lower level of CIL. • LAs which decide to establish a CIL must report certain information to their local communities to ensure that they and developers can hold authorities to account over the way that CIL receipts are used to support the growth of their area. This will be a source of data for monitoring the implementation of CIL. • CLG is planning further clarification and guidance about the new regime. This will include a new policy on planning obligations to reflect the introduction of CIL and deliver the Government's commitment to streamline planning policy.

The CIL will go a considerable way towards overcoming two key criticisms of the present system. First, there is massive inconsistency on the contributions sought from developers. Second, uncertainty currently surrounds the obligations required in section 106 agreements. Developers should consider building provision for adjustment of purchase price into development agreements to reflect the impact of the CIL.

The CIL Regulations have an immediate impact on the ability of LPAs to seek benefits under Section 106 of the Town and Country Planning Act 1990 as they also include significant changes to planning obligations made under Section 106. Guidance issued alongside the new regulations makes it clear that the government sees CIL as the proper way to seek contributions from developers to fund local infrastructure requirements. The government has, therefore, acted to limit the scope of planning obligations in order to encourage the take up of CIL.
Most importantly, the new regulations now put government's policy test for the use of Section 106 obligations on a statutory footing, thereby removing the discretion of LPAs as to whether or not the test is strictly applied. The test now requires that a planning obligation should be:

- necessary to make the development acceptable in planning terms;
- directly related to the development; and
- fairly and reasonably related in scale and kind to the development.

The effect is that the wide interpretation of Section 106, which has long been supported by the courts and, to date, allowed LPAs to seek a range of benefits which were not necessarily directly related or proportionate to the development in question, will no longer be lawful. Developers will now be in a stronger negotiating position when negotiating the level and type of contribution required from them to secure a planning permission. In addition, where a LPA has adopted CIL, the new regulations prevent the use of Section 106 to seek either the provision of or contributions towards any infrastructure covered by CIL. This measure is to prevent a planning authority from double charging developers.
By April 2014, even where an LPA has chosen not to adopt CIL, they will only be able to pool Section 106 contributions from up to a maximum of five separate planning obligations in order to fund infrastructure works. LPAs will either have to implement CIL or face a possible shortfall in infrastructure funding. As a result, planning obligations will be restricted to matters which mitigate the direct impacts of the development proposals to which they relate, so as to make the development acceptable in planning terms.

The coalition government stated on 1 July 2010 “The government are currently considering the future of the CIL. We will make a public announcement shortly”.

6.7 Flood defence levies and the local levy

The EA is responsible for raising charges and levies to fund our flood defence works. This includes internal drainage board precepts and general drainage charges. Under the Water Resources Act 1991, only the EA is able to issue notices of levies and drainage charges to fund the cost of flood defence activities. Revenue of this nature has to be both raised within and expended solely for the benefit of each flood defence district. The FWM Act will enable the EA to issue levies to the LLFA for an area in accordance with section 74 of the Local Government Finance Act in the same way that they could previously raise levies under the Water Resources Act 1991, which will be repealed. Under existing provisions, local authorities have invested around £27m a year in the past three years by means of local levy.

The FWM Act requires that the consent of the RFCCs continues to be needed for the EA to raise funds through the local levy, and for spending this and other money raised locally. It is intended to continue to require a majority of local authority representatives for decisions to raise the local levy. The FWM Act will also extend the role of the RFDCs, to become Regional Flood and Coastal Committees (RFCCs), and as a result allow them to raise funds through the existing local levy for locally important works to manage coastal erosion. Local levy is paid by local authorities and they are funded through the local government settlement to meet the expectation. If levy increased by 10 per cent, to reflect the national split between flooding and erosion work, it is understood that county and unitary authorities will be provided with an extra £2.7m a year in their settlement. Local authorities may vote as members of the committees to spend more or less than this.

The local levy is well established and is used at present. The practical application of the local levy invariably demands a joint approach involving local authorities, community resources, developer contributions and the EA. This source of funding is vital to ensuring that there is greater choice and flexibility to local authorities to support local priorities that do not attract grant funding. Greater choice and flexibility may lead to an increase in the amount of activity funded by means of local levy because it will be available for coastal erosion risk management for the first time. For example, communities across Yorkshire benefited from increased funding for local flood defence schemes thanks to a 20 per cent increase in investment which was approved by the Yorkshire RFDC. The funding will increase from £1.128 million to £1.5m in 2010/11. The regional development agency, Yorkshire Forward, will also contribute £500,000 to the fund, which will take it to almost £2m in the next financial year. The funding will be spent on schemes which would not otherwise qualify for resources from national flood funding but are important to people. Many of the projects funded by the local levy fund are carried out in partnership with other organisations and frequently attract further funding to maximise the benefit to the communities affected. This funding represents a lifeline for small communities which are vulnerable to flooding. The levy is designed to fund a programme of flood reduction schemes that are important to the region, and typically involve projects that would not otherwise receive funding from central government. Levy money is currently supporting more than 30 schemes throughout Yorkshire.

6.8 Summary and recommendations

In light of the significant potential income, estimated by DCLG to be in the region of £700m, to be derived from the successful introduction of CIL it is important that the LGA monitors closely the government's consideration of the future of the proposed levy. Depending upon the outcome the LGA will need to consider the practicalities of introducing the levy and the steps to be taken or examining the implications of any decision to change or cancel its introduction.

There is evidence of large number of important case studies available outlining good practice in relation to partnerships and other forms of joint working with developer, businesses, water companies and local authorities designed to secure additional funding for flood defence projects. There is clearly a need to capture a range of these examples in order to develop a comprehensive funding guide explaining current and future funding arrangements for flood risk management in England. It is recommended that the LGA considers the preparation of the guide, which should include the alternative sources of funding approved by the LGA. It is also recommended that Defra and the EA are requested to provide financial and other resources as a contribution to the preparation of the guidance, which should include case study examples on each funding option.

7. Development of a funding strategy using the available funding sources

7.1 Overview

It is clear that the government and the EA are looking for local authorities to adopt a strategic approach to the sourcing and development of funding in support of flood defence works. The government is pointing to the assembly of a funding package derived from some or all of the relevant sources available as the approach to meeting the costs of flood defences. The use of local flood risk management strategies are seen as an opportunity for LLFAs, working closely with partners, to bring together the complete picture on flood risk in the area and what can be done to reduce it over the medium to long term.

This approach suggests that a medium to long term funding structure for a lead authority in relation to securing flood defence works in its area may consist of any or all of: the authority's revenue budget for flood defence works; a specific levy additional to council tax; business rates supplement; CIL revenues; Section 106 receipts; other external contributions; finance derived from partnerships; the use of local authority assets; and the extension of the local levy available to RFDCs.

The resource requirements to be faced by local authorities in developing a fully effective funding structure on the lines outlined above should not be underestimated. The assembly of a complex and wide ranging package of funding within relatively short timescales requires excellent teamwork among key participants and close coordination of a range of specialist multi-disciplinary professional and support functions within the LLFAs concerned.

The establishment of partnerships, joint ventures and effective relationships on a multi-agency, cross-departmental basis demands high level involvement of senior personnel, external advisers and appropriate financial resources to achieve success. The rewards are likely to be significant but obtaining and packaging finance from a number of disparate sources will prove to be a difficult proposition for most local authorities therefore requiring a level of investment commensurate with the outcome and the skills, experience and responsibilities required to achieve success.

7.2 Imperative to secure alternative funding sources

The Flood and Water Management Bill clarifies the roles and responsibilities of operating authorities (the EA, internal drainage boards and local authorities). The Act introduces a clear national oversight role for the EA and a local leadership role for county and unitary local authorities. Within that structure it is clear that the government, Defra and the EA are looking for local authorities to adopt a strategic approach to the sourcing and development of funding in support of flood defence works.

There are many examples of statements from senior Ministers and other politicians, senior civil servants and advisers advocating partnerships, joint ventures and similar organisational structures designed to implement plans to secure the funding required to meet flood defence costs.

Richard Benyon MP emphasised during a debate in Parliament on 13 July 2010 that "[The coalition government] want to ensure that we are using every possible means to access funds to use local resources and, when possible, levy funding and also to ensure that we are fulfilling our responsibilities as a government."

Hilary Benn, the former Environment Secretary, in his foreword to the EA's long term investment strategy said "The answer may be different in different places, depending on local priorities and circumstances… Those at risk- who live and work in vulnerable areas and communities- should have a real choice in what gets done; and should be able to say they want to do more if they value going further than government can justify from a national perspective… local democracy can help decide where there is a need to target more resources, and how the extra costs are best shared."

The Chief Executive of the EA, Dr Paul Leinster, in his speech at the LGFF in July 2010 indicated that future investment in flood defences will require greater contributions from communities and businesses. Dr Leinster said that local contributions to the funding of flood defences will have to play a greater role in reducing the risk of flood and coastal erosion.

The Defra paper *Funding for Flood & Coastal Erosion Risk Management in England: Investment Outlook and Policy Direction* by D.M. Johns and T.R. Crago comment explicitly as follows "Regardless of how much is earmarked by government for flood defence in the coming years, the choice is relatively simple for each area of the country. Communities can continue to rely on whatever the EA is able to provide, accepting that there is a limit to what can be justified to the taxpayer. Or local authorities can explore with communities, the EA and within local partnerships what more could be achieved, and benefits delivered, if additional funding can be found to top up what EA can afford alone. Every project delivered without a significant proportion paid for by beneficiaries is an opportunity lost; to use the taxpayer funds that are available, and the benefits being delivered, to leverage material levels of local contributions that can be used to improve protection elsewhere in the area".

The authors also advocate the use of local flood risk management strategies as the "… the ideal vehicle for lead flood authorities, working closely with partners, to bring together the complete picture on flood risk in the area and what can be done to reduce it over the medium to long term."

This is a commendable way forward especially in light of the range and complexity of the funding options available to local authorities.

7.3 Portfolio of funding options available

It is clear that government is pointing to the assembly of a funding package derived from some or all of the relevant sources available as the approach to meeting the costs of flood defences. The main sources of funding available to local authorities outlined in Sections 2 and 3 above and recommended for further consideration and adoption are:

- General and selective property taxes such as supplements on business rates;
- A levy on properties that benefit from flood defence projects or the possibility of the introduction of capital and service charges to be levied upon the beneficiaries of flood defence works based on an approach similar to that used to recover capital and services costs from leaseholders in the social housing sector introduced as part of the Right to Buy housing legislation; and
- User fees and the sales of other physical assets or income streams from a variety of other alternatives.

At this time it is not considered to be feasible or viable to develop the TIF and asset-backed funding options.

Additional funding sources are anticipated as a result of planned initiatives such as the introduction of the CIL and the implementation of the EA's external contributions policy, which aims to secure funding for schemes from beneficiaries. Authorities may also wish to consider how partnerships or joint ventures, possibly including the use of their land and property assets, as leverage to generate additional funding.

Therefore a medium to long term funding structure for a local authority in relation to securing flood defence works in its area may consist of any or all of: the authority's revenue budget for flood defence works; a specific levy additional to council tax; business rates supplement; CIL revenues; Section 106 receipts; other external contributions; finance derived from partnerships; the use of local authority assets and the extension of the local levy available to RFDCs.

Diagram 1: LLFA – flood defences funding structure

Primary funding sources

- The local authority's revenue budget for flood defence works

Secondary funding sources

- Specific levy additional to council tax
- TIF
- Business rates supplement
- CIL receipts

Additional funding sources

- Other external contributions
- Finance derived from partnerships
- The use of local authority assets
- The local levy avaiiable to RFDCs

7.4 Development of a funding structure

The structure assumes that local authorities' primary funding source is revenue expenditure sufficient to take forward surface and groundwater flood risk management and the local flood risk leadership role announced as part of the government's response to the Pitt review. However the outcome of a full Spending Review is to be announced in October 2010 and it is not possible to pre-empt the result. Defra recognises that the FWM Act will place significant extra responsibilities and burdens on LLFAs and is understood to be committed to funding local authorities for their FCERM. The financial implications of the measures have been assessed and agreed with the DCLG and it is understood that estimates and assumptions will be kept under review as implementation takes place. A joint Defra and LGA review panel has Defra Ministers and LGA members on resource, capacity, skills and training issues relating to the uptake and implementation of the new powers and duties by local authorities as set out in the FWM Act and Flood Risk Regulations.

As well as funding the LLFA's role, Defra is also committed to ensure that the ongoing costs of maintaining SUDS, adopted as a result of the new duty, will be funded in full. As a result of concerns raised by local authorities, Ministers have committed to publish a clear way forward on long term funding for SUDS maintenance prior to implementation of the FWM Act. This will take account of circumstances faced by local authorities and developers

The funding structure also assumes implementation of the EA's external contributions policy, the CIL, business rates supplements and the continuation of Section 106 agreements in parallel with CIL. The introduction of the CIL alongside the continuing powers for LPAs to impose planning obligations means that the burdens imposed on the public purse as a result of more people and properties being placed in at-risk areas are fully compensated for as part of the planning process. This assumption will need to be reviewed as the CIL begins to be implemented by LPAs.

All of these sources could be used to increase funding for FCERM and allow additional local discretion over what and when projects are delivered in return for the funding provided. The introduction of new funding sources, including CIL, are intended to: simplify the funding regime for FCERM; strengthen accountability and value for money; increase the total amount invested in FCERM; allow greater local discretion in where and when projects are delivered and to ensure developers bear both the short and long term costs of managing the risk created by placing more people, property and infrastructure in areas of flood risk.

7.5 Summary and recommendations

The resource requirements to be faced by local authorities in developing a fully effective funding structure on the lines outlined above should not be underestimated. The assembly of a complex and wide ranging package of funding within relatively short timescales requires excellent teamwork among key participants and close coordination of a range of specialist multi-disciplinary professional and support functions within the LLFAs concerned. It is likely to involve a project management structure comprising a high level project steering group, project management expertise and a core team covering the major disciplines involved including finance, technical FCERM, planning, property valuation and development analysis, together with specialist support to provide high level expertise in specialist aspects found in these projects. Moreover the establishment of partnerships, joint ventures and effective relationships on a multi-agency, cross-departmental basis demands high level involvement of senior personnel, external advisers and appropriate financial resources to achieve success. The rewards are likely to be significant but obtaining and packaging finance from a number of disparate sources will prove to be a difficult proposition for most local authorities therefore requiring a level of investment commensurate with the outcome and the skills, experience and responsibilities required to achieve success.

It seems that local authorities will need all the help and resources they can get to implement the approach advocated by government, Defra and the EA. The proposed comprehensive funding guide should outline of good and best practice in relation to the selection of appropriate funding sources and the assembly of those sources into a strategic medium to long term financing structure. It is recommended that the LGA gives full support to this approach and considers the need to establish other training methods if possible with assistance and resources from Defra and the EA.

8. Recommendations and conclusion

8.1 Local authority bond schemes

In order to progress implementation of local authority bond schemes it is recommended that the Treasury is requested to investigate the following matters in greater detail:

- Introduce an overseeing corporate body possibly a company with a relatively limited share capital, all of which should be held on trust by the government for the benefit of the communities of the UK recognised as being at risk from flooding.
- Investigate the case for treating interest on the bonds tax free and thereby encourage pension and life funds to play a greater role in channelling savings into flood defence and other infrastructure projects.
- Review the mechanisms designed to hold down the cost of capital to ensure that the cost of this form of borrowing is rendered viable for local authorities.

Given government support local authority bonds are a practical way forward being relatively straightforward to implement, the benefits for the flood affected areas of the UK would be significant and the UK pension industry would benefit from a secure investment fund.

8.2 Loans based upon reduced insurance premiums

It is recommended that it is not appropriate to attempt introduce a mechanism designed to raise income to provide loans based on reduced insurance premiums at this time.

8.3 Business rates supplements

The use of business rates supplements offers a viable approach and the prospect of significant funding over the next decade and therefore it is recommended that the LGA's Environment Board is encouraged to promote the option. It is also recommended that Defra and the EA are urged to support pilot financing projects with local authorities.

8.4 A levy additional to council tax

8.4.1 General levy across local authority areas

The use of a general levy across local authority areas offers a viable approach and the prospect of significant funding over the next decade and therefore it is recommended that the LGA's Environment Board is encouraged to promote the option. It is also recommended that Defra and the EA are urged to support pilot financing projects with local authorities.

8.4.2 Levy upon beneficiaries – capital and service charges

It is clear that there is significant annual income potential measured in tens of millions of pounds totalling over £100m over the next decade if an appropriate structured approach to the introduction of levies upon beneficiaries can be formulated. Further research is required on the question of how to identify beneficiaries and assess their benefits in order to facilitate the introduction of this approach. It is therefore recommended that Defra and the EA are requested to fund this research and thereafter support pilot financing projects with local authorities.

8.5 New sources of financing – TIF and asset-backed financing

TIF projects work by allowing local authorities to borrow money by issuing bonds in the open market, which are secured against the expected increased in tax revenue for a specified period associated with a new development. Commentators are strongly advising the government to at least trial some TIF projects in some areas over the next two years, with a view to rolling the system out nationally thereafter, if the pilot scheme proves successful.

Both TIF and asset-backed financing methods require significant support from government to be successful. Further research is required on how to introduce these mechanisms. However there again may be interest in establishing some pilot schemes which lend themselves to effective public and private sector partnerships. It is therefore recommended that Defra and the EA are requested to ascertain Treasury views on these options and, if supported, be requested to fund this research and thereafter support pilot financing projects with local authorities.

8.6 Roles of the insurance and water industries

8.6.1 Insurance industry

It is important that the LGA monitors carefully the outcome of forthcoming discussions between the ABI and the government on the existing agreement in relation to the future of flood insurance. Thereafter there is considerable scope to conduct further research in association with the ABI on the link and relationship of insurance premiums and increased funding sources from local authorities. It is recommended that the LGA considers the opportunity for greater liaison with the ABI with a view to exploring options and formulating mutually beneficial and viable funding options.

8.6.2 Water industry

There is an opportunity for local authorities to work closely with water companies in sourcing additional funding sources through partnerships and joint venture arrangements. It is recommended that the LGA reviews these opportunities in greater detail and thereafter request Defra and the EA to support pilot partnership or joint venture financing projects where appropriate.

8.7 Community and development funding

In light of the significant potential income, estimated by DCLG to be in the region of £700m, to be derived from the successful introduction of CIL it is important that the LGA monitors closely the government's consideration of the future of the proposed levy. Depending upon the outcome the LGA will need to consider the practicalities of introducing the levy and the steps to be taken or examining the implications of any decision to change or cancel its introduction.

There is evidence of large number of important case studies available outlining good practice in relation to partnerships and other forms of joint working with developer, businesses, water companies and local authorities designed to secure additional funding for flood defence projects. There is clearly a need to capture a range of these examples in order to develop a comprehensive funding guide explaining current and future funding arrangements for flood risk management in England. It is recommended that the LGA considers the preparation of the guide, which should include the alternative sources of funding approved by the LGA. It is also recommended that Defra and the EA are requested to provide financial and other resources as a contribution to the preparation of the guidance, which should include case study examples on each funding option.

8.8 Developing a funding strategy using available sources

The proposed comprehensive funding guide should outline good and best practice in relation to the selection of appropriate funding sources and the assembly of those sources into a strategic medium to long term financing structure. It is recommended that the LGA gives full support to this approach and considers the need to establish other training methods if possible with assistance and resources from Defra and the EA.

8.9 Conclusion

Britain faces a tough challenge. The UK is in need of a step change in its infrastructure provision. Competing in a 21st century world with a ruthlessly competitive global economy and the challenges of climate change mean that important decisions on the funding of our flood defence infrastructure required urgently. Innovative local funding is needed for flood prevention and mitigation. The level of funding so far available for infrastructure from the public sector falls far short of what is required and government finances will be under pressure for the foreseeable future. In consequence there is a need to find ways to maximise its share of public funding and spend that money more efficiently, find new mechanisms for repaying investment in flood defence infrastructure and attract new sources of funding for investment. The adoption of the recommendations outlined above will represent an important step in meeting the challenges ahead.